P.4 MTC INSTRUCTIONAL MATERIALS & LOWER CLASS WORK
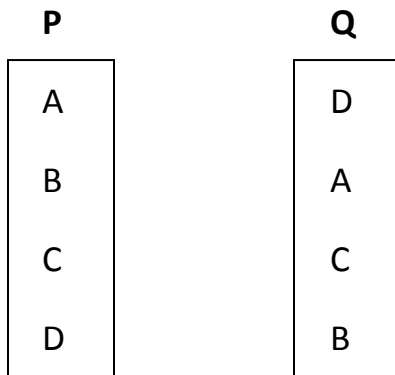
TOPIC	INSTRUCTIONAL MATERIALS
Set concept	- Charts - Empty boxes - Polythene bags - Bottle tops - Buckets - Counters - Stones - Seeds - Fruits - Pencils - Mabled - Coloured eggs - Letter cards
Numeration system and place values	- Abaci - Number cards - Sticks in bundles i.e. hundreds, tens, ones - Place values charts - Charts showing roman numbers - Number line marked 9, 0.1, 0.2, … - Stones - Place value charts for decimals - Cut outs - Flash cards with numbers
Operation on numbers	- Stones - Sticks - Seeds - Place value charts - Abaci - Containers for multiplication and division
Number facts and sequences	- Charts - Multiplication table - Number cards - Counters
Fractions	- Oranges - Sugar canes - Paper cut-outs - Charts - Scissors, knives, papers for learners to cut
Graphs and interpretation of information	- Wooden blocks - Tins - Boxes of matches - Squared papers - Metre ruler

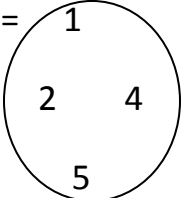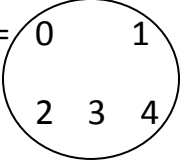|	
	- Graphs drawn on charts - Oranges - Balls - Pens - Books
Geometry	- Wooden plane figures (square, rectangle, kite, rhombus, circle, parallelogram, triangle, pentagon, hexagon) - Wooden solid figures (cube, cubodid, tetrahedron, triangular pyramid, cylinder) - Manilar papers - Scissors - Glue - Chalkboard set - Mathematical set
Measures	- Notes and coins - Pictures showing shopping activities - Classroom shop - Metre ruler - Wall clock - Calendar - Containers - Water - Thermometer
Algebra	- Pencils - Coins - Seeds - Books - Stones - Sticks - charts

LOWER CLASS WORK

SET CONCEPT

1.   What is a set?

2.   Given that set A = {a, b, c, d}. How many members are in set A?

3.   What is an empty set?

4.   Match members of set P and Q correctly

```
        P              Q

     ┌─────┐        ┌─────┐
     │  A  │        │  D  │
     │     │        │     │
     │  B  │        │  A  │
     │     │        │     │
     │  C  │        │  C  │
     │     │        │     │
     │  D  │        │  B  │
     └─────┘        └─────┘
```

5.   Name the set below

        {a, e, i, o, u} A set of _____

6.   Given that set A = (1 2 4 5)   and set B = (0 1 2 3 4)

        Which set has more members?

NUMERATION SYSTEMS AND PLACE VALUES

1.   Show the following numbers on the abacus

        a)   1 2 4 5

        b)   3 0 2

2.   What numbers have been shown on the abacus below:

a)   Th   H   T   O   b)   Th   H   T   O

3.   Write the following in words.

a)   340   b)   4012

4.   Complete;

a)   3241 = _____ Thousands _____ hundreds _____ tens _____ ones

b)   1023 = _____Thousands _____ hundreds _____ tens _____ ones

5.   What is the place value of 3 in 7382?

6.   Expand 3214 using values

7.   What number has been expanded to give 300 + 20 + 7

8.   What is the value of 2 in 1234?

OPERATION ON NUMBERS.

1.   Add: 2 + 3

2.   Okello is 14 years. John is 16 years. What is their total age?

3.   Subtract: 6   2

                    - 2   5

                    _____

4.   Find the sum of 16 and 29.

5.   What is the difference between 96 and 59?

6.   Multiply: 1 4 6

                      x   2

                      _____

7.   Divide:

                7 / 2 5 2

8.   A bus carries 80 passengers in a day. How many passengers will it carry in a week?

9.   A school got 243 points in sports and 90 points in cleanliness. How many points did it get altogether?

10.   Subtract 20 from 100

NUMBER FACTS AND SEQUENCES.

1.   Write the missing numbers

        a)   1, 2, 3, _____, 5, _____, 7

        b)   1, 3, 5, _____, _____, 11, _____

        c)   16, 14, 12, ____, _____, _____

2.   Use multiplication to show 6 + 6 + 6 + 6

3.   Complete the magic square below.

9		7
	6	8
5		3

4.   Fill in the blank spaces.   3 x 4 = ___ + ____ + ____ = ____

FRACTIONS:

1.   Define the term fraction

2.   Shade $^2/_5$

3.   Name the shaded fraction.
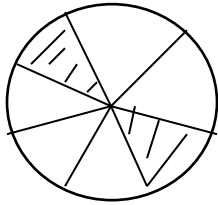
4.   How many halves are in two wholes?

5.   Add: $\underline{2}$ + $\underline{3}$ + $\underline{1}$
              9   9   9

6.   Subtract: $\underline{4}$ - $\underline{1}$
                    5   5

7.   Which fraction is bigger, $\underline{1}$ or $\underline{1}$?
                                  2   3

8.   Write the fraction of the unshaded part.
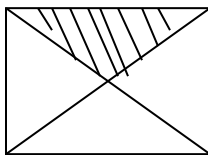
9.   What fraction is left after eating $^2/_3$ of an orange?

10.   Subtract: $\underline{3}$ from $\underline{5}$
                    6   6

GRAPHS AND INTERPRETATION OF DATA / INFORMATION

1.   The pictograph below shows the number of balls sold in Mr. Mukasa's shop in a week. Study it carefully and answer questions that follow.
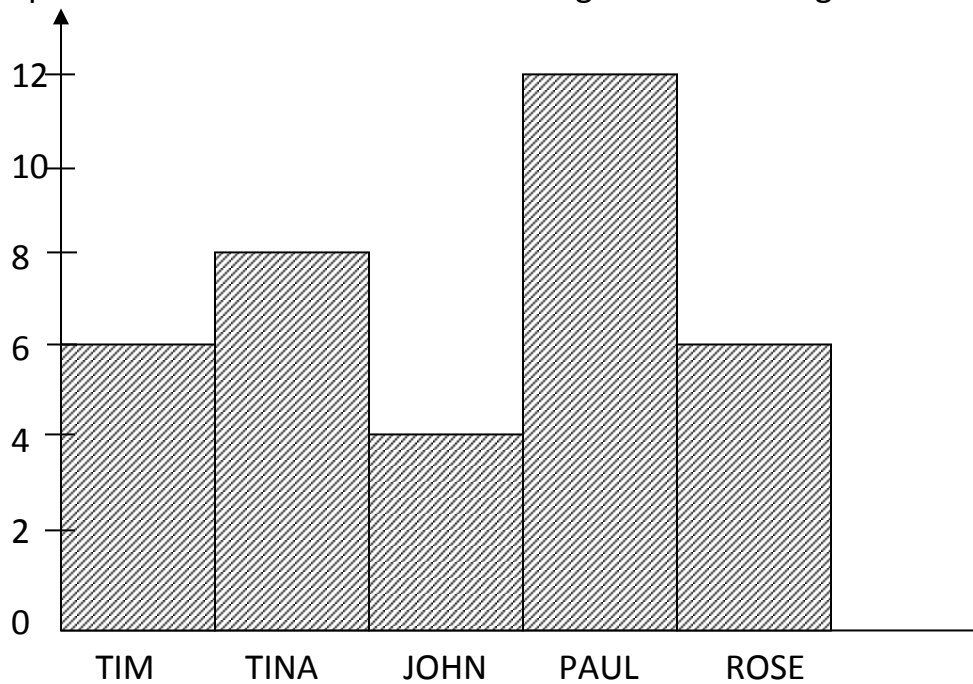
Monday	⚽ ⚽
Tuesday	⚽ ⚽ ⚽
Wednesday	⚽

Thursday	⚽ ⚽ ⚽ ⚽ ⚽
Friday	⚽ ⚽ ⚽

Key: ⚽ stands for 10 balls.

a) How many balls were sold on Monday?
b) On which day did he sell the smallest number of balls?
c) In which two days did he sell the same number of balls?

2. The graph below shows the number of mangoes each child got.

a) Who got the biggest number of mangoes?
b) How many mangoes were given to Tim?
c) Which two children got the same number of mangoes?
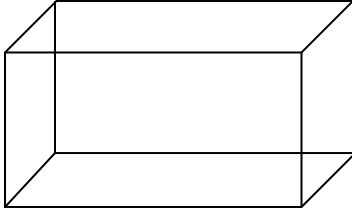d) How many mangoes were given out altogether?

GEOMETRY

1. Draw the following shapes:
   a)   Circle
   b)   Rectangle
   c)   Square
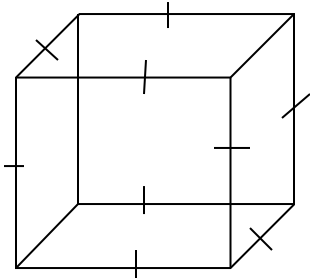   d)   Kite

e)   Oval
f)   Trapezium
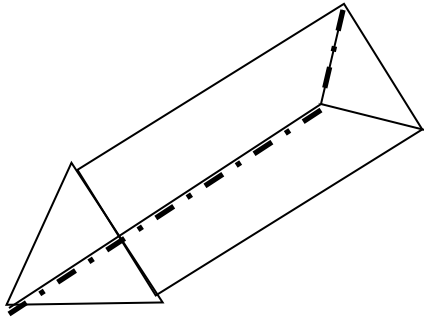g)   Cone
h)   Triangle

2.   Name the shapes below.
a)

_____

b)

_____

c)

MEASURES:

Money
Study the shop list below and answer questions that follow.

ITEM	PRICE
Soap	Shs. 700 a bar

Book	Shs. 300 a book
Pens	Shs. 200 a pen
Sugar	Shs. 1000 per kg
Pencil	Sh. 100 a pencil

a) What is the cheapest item?
b) Find the cost of four books
c) Find the total cost of buying 1 bar of soap and a kg of sugar.

TIME

1. Draw a clock face and show a half past three o'clock.
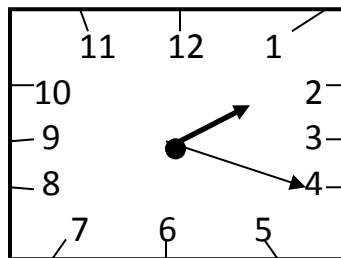2. Draw a clock face showing a quarter to six o'clock.
3. Write the time shown on clock faces below

a)

b)
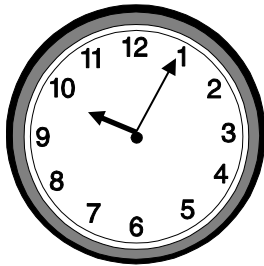
LENGTH AND AREA
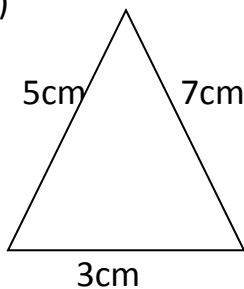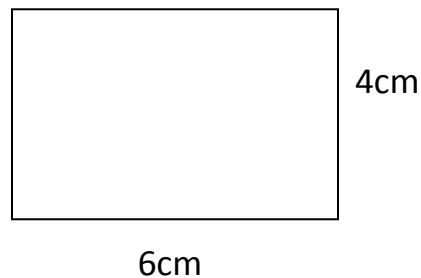
1. Change the following metres to centimetres
    a) 3 metres
    b) 6 metres

2. Find the perimeter of the figures below:
    a)

5cm   7cm

3cm

    b)

4cm

6cm

3. Find the area of the figures below.
    a)

4cm

    b)

6cm
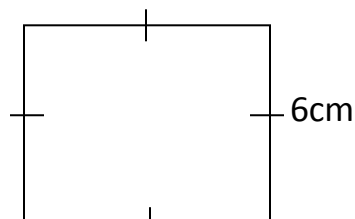
5cm

CAPACITY:

1. Add: 5   6 litres   2.   Subtract: 7   3 litres
          + 1   7 litres   - 4   4 litres

          _____   _____

3. Nambi collected 63 litres of milk from her farm. She sold 55 litres. How much milk did she remain with?

4. Change the following litres to centiliters.
   a)   4 litres
   b)   9 litres

5. How many one litre cups will fill a 14 litre jerrycan?

6. How many half litre tins will fill a 22 litre bucket?

WEIGHT

1. Add: Kg   g   Subtract: Kg   g
             4   120   9   310
          + 3   460   - 4   260

          _____   _____

3. Which one is heavier?

4. Otim weighs 17kgs 750g. okello weighs 20kgs   900g . How many more kg has Okello than Otim?

ALGEBRA:

1.   Fill in the missing numbers.

a)   □   + 3 = 7

b)   □   - 5 = 5

c)   3 x □   = 12   d)   12 ÷ □ = 6

2.   I had Shs. 20. My mother gave me more and now I have Shs. 46. How much money did my mother give me?

3.   Father had some books, he gave me 5 books and remained with 7 books. How many books did he have at first?

4.   Auma had some pencils. She shared them equally among 3 pupils and each got 9 pencils. How many pencils had she before?

SIR APOLLO KAGGWA SCHOOLS

TERM I 2009: LESSON NOTES FOR MATHEMATICS P.4

LESSON 1

TOPIC I: **SET CONCEPTS**

SUB TOPIC: **REVISION OF SETS**

CONTENT: **Definition**

A set is a collection of well defined objects.
An element is an object or a thing which belongs to a set.
(ii) Naming sets
- A set of tomatoes
- A set of bags etc
- A set of counting numbers
- A set of whole numbers
- A set of even numbers
- A set of odd numbers

(iii) Grouping sets i.e. ⬭ = in twos, 3 groups.
6 objects altogether.
Counting members in a set
Examples
        T
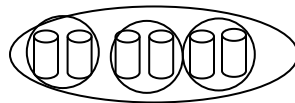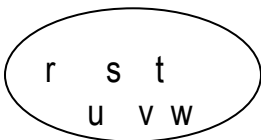
r   s   t   set T has 6 members therefore n(T) = 6 members
  u   v w   therefore n(T) = 6 members

W   =   (a, b, c)   set W has 3 members
                        Therefore n(W) = 3 members.
(iv) Listing members of a set.
ACTIVITY: Exercise 1a page 1 Nos. 1 – 8 (MK MTC bk 4 old edition)

Remarks.

LESSON 2: **CONTENT:** Equivalent and non-equivalent sets.
Equivalent sets are sets with the same number of members which are not exactly the same.

Symbol   ⟷

Example.

B = (x, y, z)   c = (4, 5, 6)

Set B is equivalent to set C

Or   B ◄———► C

N.B: Equivalent sets are also called matching sets.

Non – Equivalent sets

These are sets with different number of members that are not exactly the same.

Symbol
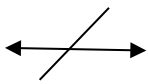
Example

X = (m, n, p)   Y = (m, w, y, x)

Set x and y are non – equivalent sets.

Or   x ◄———► y

N.B: Non-equivalent sets are also called non – matching sets.

Activity: Exercise 1 (MK New edition) page 6.

Remarks.

LESSON 3:

TOPIC: **SET CONCEPTS**
SUB-TOTAL: **TYPES OF SETS**
CONTENT: **EQUAL SETS AND EQUIVALENT SETS**

(i) **Equal sets**

Equal sets are sets which have the same number of elements which are exactly the same.

Examples of Equal sets

Symbol for equal set   =

(ii)**Equivalent sets.**

Equivalent sets are sets with the same number of members which are not exactly the same.

Examples:

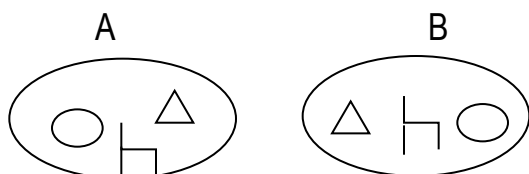A   =   (a, b, c, d)   B   =   (1, 2, 3, 4)

Set A and B are equivalent sets.

Symbol for equivalent set   ←——→

(iii) Comparing equal and equivalent sets.

Examples:

If A = {a, b, c, d, e}   B= {b, d, c,a, e}
Then, set A = B.

If K = { ⚽ , ▽ ☕ } , M ={ 🌹 ✏ 📖 }.
Then set K ←——→ M.

ACTIVITY: Exercise 1G page 8 (MK New Edition)

Remarks:

LESSON 4:

CONTENT: EMPTY SETS

Empty sets are sets which do not have members or a set whose members cannot be found. They are the sets without members. The empty set can also be called a null set or void set.

Symbol.   ⊘   Or   (   )

Examples

(a)   N   M
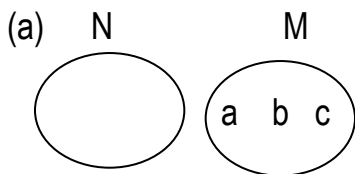
Set N is an empty set.

(b)   A set of goats with 6 legs each is an empty set.

ACTIVITY: Exercise 1b and 1 C page 2 (Mk New edition)

Remarks.

LESSON 5:

CONTENT: Even and Odd sets.

(i) Even sets.

These are sets whose members can all be paired.

Example:
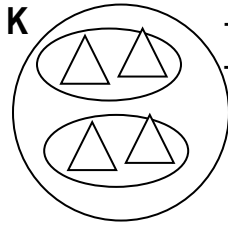
K - Set K has 4 members.

- Members of set K have all been paired, therefore it is an even sets.

NB: An empty set is an even set.

(ii) Odd sets:

Odd sets are sets whose members can not all be paired.

Example:
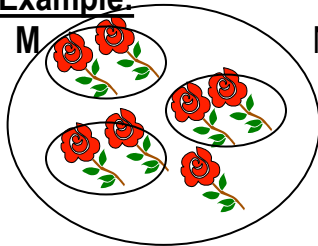
M Not all members of set M have been paired. Therefore it is an <u>odd set.</u>

ACTIVITY: Exercise 1(d) and 1 (e) page 3 and 5 (New Edition)
Remarks:

LESSON 6:
CONTENT: JOINT AND DISJOINT SETS
(i) Joint sets
Joint sets are sets with common embers. They are the sets with atleast one common member.
    Joint sets are also <u>inter-secting sets</u>
Examples
P = (a, b, c, d, e)   Q = (a, e, i, o, u)
        Common members   = (a, e)
        Therefore, set P and Q are joint sets.

(ii) Disjoint sets are sets.
   Disjoint sets are sets without common members.
  Disjoint sets are also called <u>Non – intersecting sets</u>.

Examples;
        D={x, y, z, w}   K = {7, 4, 5, 6}
        Common members =._____
        Therefore set D and K are <u>disjoint sets</u>.

ACTIVITY.   Exercise 1 page 10 (Mk Old edition)
Oxford Pri. MTC bk 4 page 10 – 11.
Remarks:
LESSON 7.
SUBTOPIC : Intersection of sets.
CONTENT: Definition
Intersection of sets is a set with common members.
- The symbol for intersection of sets.

$$\cap$$

Example:
A = {a, b, c, d, e}   **B** = {a, e, I, o ,u}
(i) Find A $\cap$ B.
A $\cap$ B = { a, e}
(ii) How many members are in set A $\cap$ B?
There are 2 members in set A $\cap$ B
- Shading the intersection set.
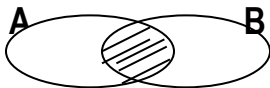
- listing common members from a venn diagram.

Example:
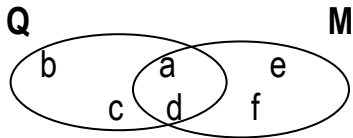
(ii) Find Q $\cap$ M
Q $\cap$ M = { a, d}
(iii) How many members are in set Q $\cap$ M or n(Q$\cap$M)
There are 2 members in set Q $\cap$ M

ACTIVITY: Exercise 1(g) and 1(h) page 12 (Old Edition)

Remarks:

LESSON 8:
CONTENT: UNION OF SETS
Union of sets is a collection of all the members in the given sets.
Symbol; $\longrightarrow$ U
Examples
If P = (a, e, I, o, u)   Q = (a, b, c, d, e)

What is P U Q?

Answer: P U Q = (a, e, l, o, u, b, c, d)

N.B: Common members are written once.

Shading the union sets

Examples

N   M

N U M is shaded
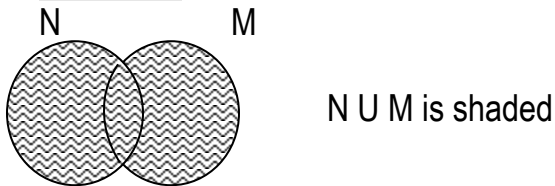
Listing members of Union set from a venn diagram.

Example:
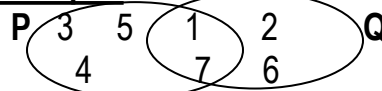
(i) Find $P \cup Q$ = { 3, 4, 5, 1, 7, 2, 6}.

(ii) How many members are in set $P \cup Q$?

<u>7 members.</u>

ACTIVITY: EXERCISE 1 PAGE 14 (MK NEW EDITION)

<u>REMARKS.</u>

LESSON 9:

CONTENT:

(a) Difference of sets**.**

Difference of sets is a set of members that exists in one set only. i.e. Set A – B means members of set A only.

Example:

If **P** = { r , s , t , v}   **Q** = { a , t , m , s}

(i)   P – Q = {r , v}

(ii)   Q – P = { a , m}

(b) Shading the difference of sets i.e. →B – D

B   D

→D - B

B   D
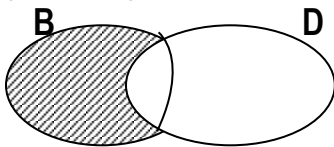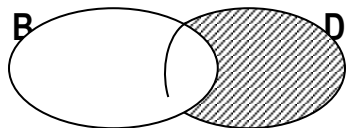
(c) Listing members of difference of sets from the venn diagram.

Example:
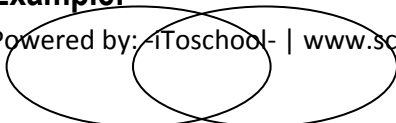
P   2   1 4   9   **Q**
     3   5

(i)   P - Q = { 2 , 3}
(ii)   Q - P = {9}
(iii) How many members are in set P only?
There are 2 members in set P only.

ACTIVITY: If set R = {p , q , m , k} and T = { m , l , l , k}
             Find (i) R - T
                    (ii) T - R
                    (iii) R only
                    (iv) T only
REMARKS:

LESSON 10:
CONTENT: Venn diagrams.
   (i) Shading and describing shaded regions.

Examples:
Shade the following:
(a) A ∩ B   (b) A ∪ B   (c) R - M (R only)
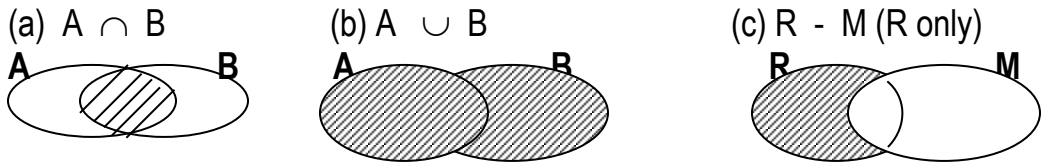
Describing shaded regions.

Examples:
Describe the shaded regions.

     Set **K**   Set B only   Set Q
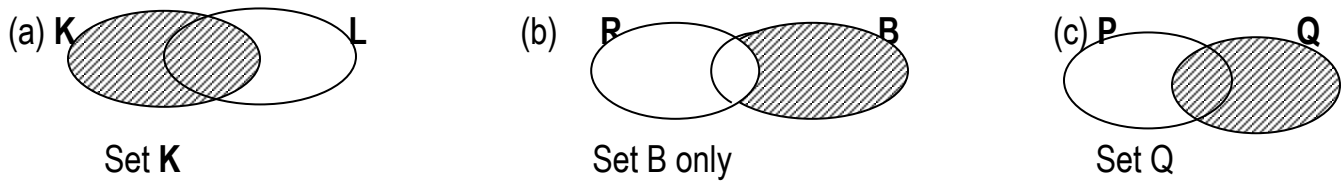
ACTIVITY: Draw and shade these regions.

   (a) A but not B
   (b) A ∪ B

    (c) Set B
    (d) B – A
Remarks.

LESSON 11:

CONTENT: putting sets on Venn diagram
Examples: Set A = (1, 2, 3, 4, 5)
               B = (0, 2, 4, 6, 8)
Represent the two sets on a venn diagram.

A   **B**
  1 3   0 6
  5 2 4 8
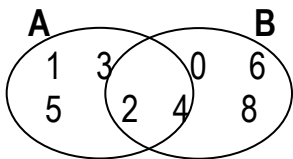
Discuss
List members of
(a)   A only (1, 3, 5)
(b)   B – A (0, 6, 8)
(c)   A n b (2, 4)
(d)   A ∪ B = (1, 3, 5, 2, 4, 0, 6, 8)
e)   B only = { 0,6,8)

ACTIVITY
Set   P = {a, b,c,d,e}
        Q={a, e, I, o, u}
Represent the two sets on the venn diagram below
      P   Q
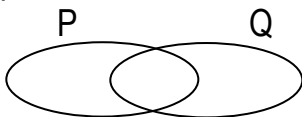
Use the venn diagram to answer (i) P ∩ Q   (ii) P ∪ Q   (iii) P only (iv) set Q

(v) P - Q   (vi) Q - P   (vii) members of Q but not p.

REMARKS

LESSON 12
SUB TOPIC Number of members in a set using symbols.

CONTENT Using symbols, the number of members is represented by letter **n** that appears outside the given set. i.e.

    (i)   n(A) means number of members in set A.

    (ii)   n(A $\cap$ B) means number of members in set A $\cap$ B, etc.

Example:

M   6   **N**

   5   1 2 4 3 7
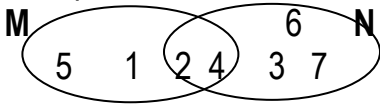
    (i)   Find n(M $\cap$ N)

              M $\cap$ N = {2 , 4}

              $\therefore$ n(M $\cap$ N) = 2 members.

    (ii)   Find n(N)

              N = { 2 , 4 , 6 , 3 , 7}

              $\therefore$ n(N) = 5 members.

    (iii)   Work out: n(M $\cup$ N)

              M $\cup$ N) = { 5, 1, 2, 4, 6, 3, 7}

              $\therefore$ n(M $\cup$ N) = 7 members.

    (iv)   Work out: n(M – N)

              M – N = { 5 ,1)}

              $\therefore$ n(M – N) = 2 members.

ACTIVITY: 1. Given the venn diagram.

    P   **Q**

   C   a b d e
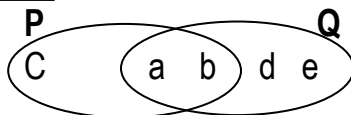
Find (i) P $\cap$ Q   (ii) n(P $\cap$ Q)   (iii) n(P - Q)   (iv) n(Q)

(v) List of members of set P.

REMARKS

LESSON 13
SUB TOPIC   SUBSETS
CONTENT

- A subset is a small set got from a big set.
- An empty set is a subsetof any set
- A set is a subset of itself (its called a super set). The suspenset is a subset similar to the given set.

➢ The symbol for subset is
➢ The symbol for not a subset is ⊄

Listing subsets
Set A = {1, 2, 3}   {   }   { 1 }
                      { 1, 2, 3}   '
                      {1, 2 }   { 2 }
                      {1, 3}   { 3 }
                      2, 3 }   They are eight subsets.

REMARKS

LESSON 14
TOPICAL QUESTIONS FOR TOPIC I (SETS)
1. A = {a, b, c, d,e,f}
      Find n(A)

2.   Use **EQUAL, EQUIVALENT OR DISJOINT**

a)   A = { ▭   ◯   △ }

b = { ⚾   🧍   ▭ }

Sets A and B are _____ sets.

b)   X = { 1, 2, 3, 4 }

       Y = {5, 6, 7 }
Set x and y are _____ sets
M = {s, p, o, t }
N= {P, O, t, s}
Sets M and N are _____ sets

3. Name these set symbols.

∅   =   _____   ∩ _____   ⊂ _____

{ }   =   _____   ∪ _____

⟷ = ——— ⟷ ————————
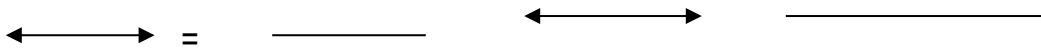
4. Q = { a, b, c, d, e}
    P ={ a, e, I, o, u}
Draw and represent sets Q and P on a venn diagram
   a) Find :
       i)   Q n P   ii)   n(Q UP)
5. Draw that
       A   B
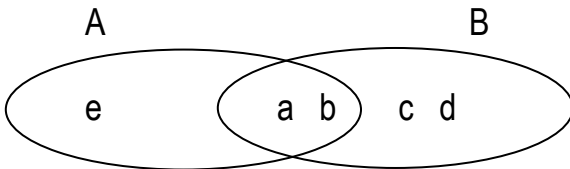
a) List the elements o in set A
b) List the elements of set B
c) List the elements of A n B
d) List the elements in A U B
e) Find A – B

6. Draw and shade the following regions
    i)   A n B   ii)   X U Y   iii)   P – Q

7.   Write a set of counting numbers less than 10.
8.   Give a set of whole numbers less than 10.
9.   Write a set of even numbers from 0 to 10
10.   Give asset of odd numbers between 4 and 10.
11.   If a {P, Q}, write all the subsets in set A.
12.   If T {rat, hen}, give all the subsets in set T.
13.   If M = {a, b, c}, write all the subsets in set M.
14.   Give two other names for empty set.

TOPIC : NUMERATION SYSTEMS AND PLACE VALUES

LESSON 15
CONTENT (lower work)

- Representing numbers on the abacus.

Example 1. Represent 4 0 6 8 on the abacus below:

Th	H	T	O
4	0	6	8
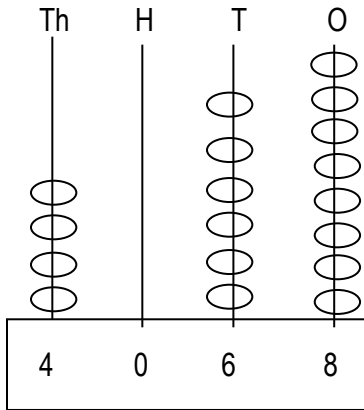
Example 2: Show each of the following on the abacus:

a) 1 3 0 5   b) 5 0 9 0

Finding place values:

Example

Find the place values of each digit **in words**

3   6   5   8   2

→ Ones

→ Tens

→ Hundreds

→ Thousands

→ Ten

In figures

```
3   6   5   8   2
                └──► 1
            └────►10
        └──────►100
    └────────►1000
└──────────► 10000
```
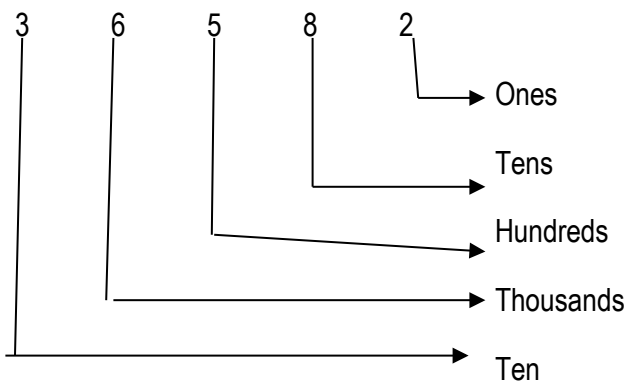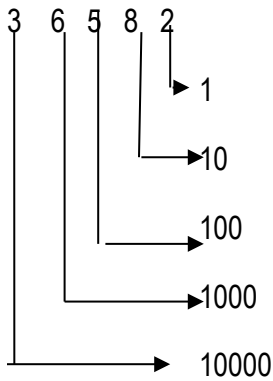
ACTIVITY
- ➢ MK primary Mathematics Book 4 (old edition) Ex 2b page 20.
- ➢ Oxford primary Mathematics Book 4 page 25
  REMARKS

LESSON 16
SUBTOPIC: Values of numbers.
CONTENT: Value is the product of a digit and its place values.

Example:
1. Find the value of 7 in the number 4702.

```
4   7   0   2
            └ Ones(1)
        └ Tens (10)
    └ Hundreds
└ Thousands
```

Value = D x P.v
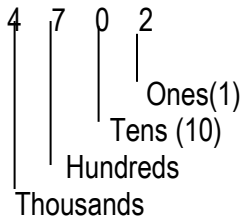
    = 7 x Hundreds

    = 7 x 100

    = 700

ACTIVITY: Exercise 2C page 21 (New edition)

REMARKS

LESSON 17
SUB- TOPIC: Expanding numbers using place values.

Example
Expand 3 7 4 6 using its place values

TH	H	T	O

3	7	4	6

10
100
1000
10000
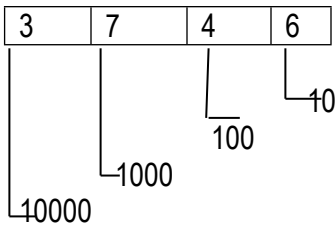
(3 X 1000) + (7 X 100) + (4 X 10) + (6 X 1)

ACTIVITY
MK Primary Mathematics Book 4 page 24

Exercise 2f

REMARKS.

LESSON 18
SUB-TOPIC : EXPANDING NUMBERS USING VALUES
Example
Expand 74326 using its values

T/TH	TH	H	T	O
7	4	3	2	6

6 X 1 = 6
2 X 10 = 20
3 X 100 = 300
4 X 1000 = 4,000
7 X 10000 = 70,000
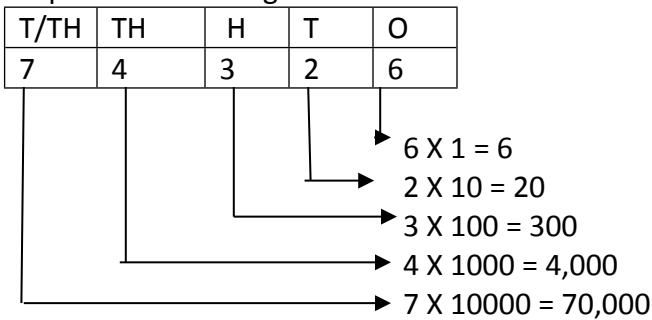
70,000 + 4000 + 300 + 20 + 6
ACTIVITY
MK Primary mathematics Book 4 Page 24
Exercise 2f
LESSON 19:
SUB TOPIC : FIND EXPANDED NUMBER
CONTENT
What number has been expanded to give
   a)   (2 x 10,000) + (3 x 1000) + (2 x 10) + (1 x 1)
        20, 000   + 3000 + 20 + 1
               2 0   0   0 0
                 3   0   0 0
                    2 0
        +   1
          2 3   0   2   1   The number is 23,021
   b) 60000 + 4000 + 200 + 8
        6 0   0   0   0
          4   0   0   0
          2   0   0

```
    +            8
        64,208    The number is 64,208.
```

ACTIVITY
What number has been expanded .

i)   100 + 20 + 2
2)   3000 + 400 + 90 + 2
3)   (9x 10,000) + (6 x 100) + (3 x 10) + (3 x 1)
4)   (7 x 1000) + (9x 100) + (4 x 1)
5.   5000 + 70 + 8

REMARKS.

LESSON 20

SUBTOPIC :   WRITING FIGURES IN WORDS

CONTENT
EXAMPLE
Write 4 3 2 6 5 in words

Thousand	H	T	O
4 3	2	6	5

Forty three thousand, two hundred sixty five

Example
Write 6606 in words

Thousands	H	T	O
6	6	0	6

Six thousand, six hundred six.

ACTIVITY
MK Primary Mathematics (old edition) page 21 – 22
Exercise 2d
REMARKS

LESSON 21

SUB TOPIC : WRITING WORDS IN FIGURES

CONTENT
Write twelve thousand eight hundred thirty two

```
Twelve thousand            1      2       000      o r
Eight hundred        +              800
Thirty two                                    32
                           1      2     832
                           -------------------------
```

ACTIVITY
MK Primary Mathematics (old edition) page 22

EXERCISE 2e

REMARKS.

LESSON 22

SUB TOPIC: DECIMALS (CHANGING FRACTIONS INTO DECIMALS)

CONTENT :   A DECIMAL IS PART OF A WHOLE   WITH A DECIMAL POINT

EXAMPLE I
$\frac{1}{10}$ = 0.1

=   0.1
10 $\overline{)10}$
    - 10
     - -

EXAMPLE II
$\frac{7}{10}$ =   0.7

          0.7
10 $\overline{)}$ - 70
          70
         - -

EXAMPLE III
$\frac{9}{10}$ =   0.9

   0.9
10 $\overline{)90}$
    90
       -

EXAMPLE IV
$\frac{6}{10}$ = 0.6

0.6
10 $\overline{)60}$
    60

ACTIVITY
Exercise 2g nos 1 - 12
Mk book 4 page 25
Oxford primary maths bk4 page 28
Progressive primary maths bk 4 page 66-67.

LESSON 23

SUB-TOPIC : WRITING DECIMALS IN WORDS

CONTENT
Writing decimals in words

EXAMPLE I

Write 0.7 in words

a)   0.7   = $\frac{7}{10}$

        =   Seven tenths.

b)   0. 7 = zero pint seven

EXAMPLE II

 Write 0.9 in words

a) 0. 9   = $\frac{9}{10}$

        Nine tenths

b)   0.9 = zero point nine.

ACTIVITY

Exercise 2i page 26 Mk new edition

REMARKS

LESSON 24

SUBTOPIC : WRITING DECIMALS IN FIGURES

CONTENT

EXAMPLE I

Write two tenth in figures.

        = $\frac{2}{10}$ or   0.2   or .2

Example II

Write Zero point four in figures

        =   0.4

ACTIVITY

Exercise 2h MK Bk 4 page 26

REMARKS

LESSON 25

SUBTOPIC : WHOLE AND DECIMALS

CONTENT : CHANGING MIXED FRACTIONS TO DECIMALS

EXAMPLE I

  $2\frac{1}{10}$ 2   +   0.1

        =   2.

        +   0.1

        _____

        2. 1

EXAMPLE II

$23\frac{5}{10}$ = 23 + 0.5

```
 =      2 3
          0 .5
       2 3  . 5
```

ACTIVITY

Exercise 2j Mk bk 4 page 27.

REMARKS

LESSON 26
SUBTOPIC: PLACE VALUES OF WHOLE AND DECIMALS

CONTENT

EXAMPLE

   a) In words

Whole .   decimals

T	O	. tenths
1	3	.2

→ Tenths

→ Ones

→ Tens

   b) In figures

Wholes decimals

T	O	. tenths
1	3	.2

→ 1/10

1

10

ACTIVITY : EXERCISE 2K MK BK 4 Page 28

REMARKS:

LESSON 27
SUB- TOPIC: VALUES OF WHOLES AND DECIMAL NUMBERS

CONTENT

EXAMPLE I

33.2

T	I	T th
3	3	.2

.   ➤2 tenths = 2x 0.1 = 0.2

        ➤ 3 ones = 3 x 1 = 3

        ➤ 3 tens = 3 x 10 = 30
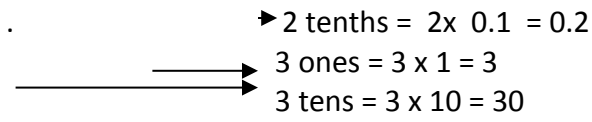
i.e the value of 2 is 0.2.

ACTIVITY

Exercise 2l page 29

Mk bk 4 new edition

REMARKS

LESSON 28

SUB TOPIC : WRITING WHOLES AND DECIMALS IN WORDS.

CONTENT

EXAMPLE I

Write 7. 5 in words

    7.5 = 7 = seven

        0.5 <u>and five tenths</u>

        7.5 seven and five tenths.

Or 7.5   =   seven point five

EXAMPLE II

Write 107.2 in words

107.2   =   100   one hundred

               7   seven

            0.2   and two tenths

       10 7.2 =   One hundred seven and two

ACTIVITY : Exercise 2n page 31 (MK New Edition)

REMARKS:

SUBTOPIC : WRITING WHOLES AND DECIMALS IN FIGURES

Content

Example I

Writing in figures

Twenty five and three tenths.

Twenty five   =   2   5

And three tenths =   + 0.3 _____

                     25.3 _____

Example II

Two hundred seventy five and one tenths

Two hundred	=	2 0 0
Seventy five	=	+ 7 5
And one tenth	=	0.1
		2 7 5.1

ACTIVITY : EXERCISE 2M PAGE 30
MK bk 4 new edition

REMARKS

LESSON : 29

SUB TOPIC :   ROMAN NUMERALS (HINDU ARABIC ROMANS)

CONTENT
TABLE **A**

Hindu Arabic	Roman Numerals
1	I
2	ii
3	iii
4	iv
5	v
6	vi
7	vii
8	viii
9	ix

TABLE B

Hindu Arabic	Roman Numerals
10	X
20	Xx
30	Xxx
40	Xl
50	L
60	Lx
70	Lxx
80	Lxxx

90	Xc
100	c

Example

1. Change 36 into Roman numerals

a)   36   =   30   +   6

=   xxx + vi

=   xxxvi

b)   14   =   10 + 4

=   X + IV

=   Xiv

ACTIVITY :   Exercise 2(0) page 34 Mk bk 4
New edition

REMARKS

LESSON 30

SUBTOPIC : CHANGING ROMAN NUMERALS TO THE HINDU – ARABIC

CONTENT:
E**XAMPLE**

1. Write XIV in Hindu – Arabic

XIV = X + IV

= 10 + 4

=   1 0

    + 4

   1   4

   _____

2)   XXXIX = XXX + IX

= 30 + 9

= 3 0

+   9

3   9

_____

ACTIVITY : Exercise 2p page 34 Mk bk 4 new edition.

REMARKS

LESSON 31

SUBTOPIC :   WORD PROBLEMS ABOUT ROMAN AND HINDU ARABIC NUMERALS

CONTENT :   - Word problems.

EXAMPLES

Namiya recorded her friends age in Hindu – Arabic numerals. Chang their age to Roman numerals.

a) Namweruka   -   11years

11 = 10 + 1

$$= \begin{array}{cc} 1 & 0 \\ + & 1 \\ \hline 1 & 1 \end{array}$$

_____

b) Apire   13 years

13 = 10 + 3

= X + III

= XIII

c) Babirye   12 years

12 = 10 + 2

$$= \begin{array}{cc} 1 & 0 \\ + & 2 \\ \hline 1 & 2 \end{array}$$

_____

ii) After that she recorded the age of her family members in Roman. Change their age to Hindu – Arabic numerals.

a) Herself   -   IX

= 10 – 1

= 9 years

b) Sister Angela   XIV

=   10 + 4

=   14 years

ACTIVITY : Learners do a written exercise copied from the chalk board.

REMARKS.

LESSON 32

SUBTOPIC : Addition of Roman numerals

Examples

i)   1x + V   ii) =   XX + VII

=   9 + 5   =   20 + 7

=   14   =   27

= 14 = 10 + 4   =27 = 20 + 7

     = X + IV   = XX + VII

     =   XIV   = XXVIII

Subtraction of Roman numerals

Examples

  a) XXXVI -   XXII   14   =   10   +   4

=	30 + 6 - 20 + 2			=	X + IV		

36 – 22   =   XIV

14

b) IX   -   V   4   =   IV

= 9   -   5

=   4

ACTIVITY :

1. XXXIV + XLV
2. XV + XXIX
3. XCII + XL
4. XXV – V
5. XXXIV – XVI

REMARKS

LESSON 33
TOPICAL QUESTIONS ON NUMERATION SYSTEM AND PLACE VALUE.

1. What is place value of the underlined digits
   30<u>6</u>2   b)   77<u>0</u>77   c)   <u>10</u>,001   d)   2<u>8</u>783   e) 13.<u>2</u>
2. Find the value of the underlined digits
   a) <u>5</u>73   b) <u>3</u>615   c) 348<u>07</u>   d) 20.<u>8</u>
3. Write in words
   a) 48349   b)   26.7
4. Write in words
   a) 48349   b)   26.7
5. Write the following in figures
   a) Twenty three thousand, nine hundred seventy one
   b) Two thousand eight
   c) Twelve and six tenths
6. Change 3 to a decimal fraction
          10
7. Change to Roman numbers
   a) 19   b)   46   c)   23
   28.   Change to Hindu Arabic
   a)   XLIX   b)   XXXI   c)   XIV

REMARKS:
LESSON 34

TOPIC :   OPERATION ON NUMBERS
SUBTOPIC :
   1. Without re-grouping
   2. Addition with re-grouping.
   3. Word problems.

Other words that call for addition, sum, total
Addition without regrouping (or without carrying), with regrouping or carrying and then word problems:
Examples

(1) 12 + 4 + 3   (2) 20 + 15 + 36 + 8   (3)   4   6   (4)   5   6   9
                                                + 5   0   + 4   2   2
                                                _____   _____

(5)   Add   4   3   9   4   6
              +   4   8   9   4
              4   8   8   4   0

(6)   A boy counted 2689 cars on Monday and 4547 cars on Tuesday. How many cars did he count in the two days?

(7)   Find the sum of 14 and 6.   (8)   Work out the total of 128 and 232
              1   4   1   2   8
              +   6   +   2   3   2
              2   0   3   6   0

Solution.
        4   5   4   7 cars
    +   2   6   8   9 cars
        7   2   3   6 cars

ACTIVITY :   Exercise 3a, 3b and 3c page 38 – 39 (MK old Edition).

LESSON : 35
SUBTOPIC : SUBTRACTION
    1.   Subtraction with out re-grouping.
    2.   Subtraction with re-grouping.
    3.   Word problems.

Other words that call for subtraction, difference, remainder.
Subtraction without regrouping (borrowing), with regrouping and then word problems.
Example:
    (i) 9 – 4 = 5   (ii)   8 – 2 – 3 = (8 – 2) – 3   (iii)   subtraction 7 from 10
                                    6 – 3 = 3   1   0
                                                                            -    7
                                                                            ____3_

        (iv)   5 6 6   (v)   7 6 4
            -    4 2 3   -   4 2 8
                1   4 3   3 3 6

(vi)   Mugumu had 2570/=. He bought a book for 343/=. What was his balance?

Solution

```
2     5     7     0/=
-     3     4     3/=
2     2     2     7/=
==================
```

(vii)   Work out the difference between 9 and 4

```
      9
-     4
      5
```

ACTIVITY :   EXERCISE 3f page 45 (MK New Edition)

LESSON 36
SUBTOPIC: Multiplication
CONTENT: Multiplying by multiples of 10.

Example:
1. 1 x 10 =   10 = 10

2. 2 x 10 =   10 + 10 = 20

3. 3 x 20 =   20 + 20 + 20 = 60

4. (i)   1 0   (ii) 2 0   (iii)   2 0
         X 1   x 2   x 3
         1 0   4 0   6 0

5. (i) 4   2   (ii)   4   7
     x1   0   x1   0
     4 2 0   4 7 0

LESSON 37
SUB TOPIC : MULTIPLICATION
Other words that calls for multiplication, product, of times.

CONTENT: MULTIPLYING BY ONE DIGIT
Examples
(i)   5 x 2 = 10   00 + 00 + 00 + 00 + 00 = 10

(ii)   3 x 4 = 12   00 + 00 + 00 = 12
                        00   00   00

(iii)   1   6   (iv)   2   3   (v)   3   6   2
         X   2   x   5   x   3

```
      3      2                1   1    5                    1 0 8 6
        12                      15                    10  18
```

(v)   4   3   4   6
       X   3

    1   3, 0   3   8

(vi)   A worker is paid 6,960/= a day. How much will the worker get if he works for 7 days.

Solution
1 day he gets 6,960/=
7 days he gets
      6960
  X   7
  48,720

∴ He gets 48,720/= in 7 days.

(vii)   Find the product of 6 and 4.

ACTIVITY : Exercise 3g Nos 1 – 3 page 46 and 3h 1 – 5 page 47 (MK New Edition)
LESSON 38

SUB TOPIC :   MULTIPLICATION BY TWO DIGIT FIGURES

CONTENT :   example

```
            2      4
        X  1       1
            2      4
      +  2   4      0
         2   6      4
```

2.   Peter picks 13 mangoes everyday. How many mangoes will he pick in a fortnight?
      Solution
      Fortnight   =   14 days
      1   day   he picks   1 3 mangoes
      14   days   he picks   1 3 mangoes
                              X   1 4
                              5   2

```
+   1 3   0
_____
  1 8 2  mangoes
```

ACTIVITY : EXERCISE 3K page 51 (MK New Edition)

REMARKS

LESSON 39
SUB TOPIC   :   MULTIPLICATION AS REPEATED ADDITION

CONTENT

      Example
a) $4 \times 2 = 2 + 2 + 2 + 2 = 8$
b) $6 \times 3 = 3 + 3 + 3 + 3 + 3 + 3 = 18$

ACTIVITY
Use repeated addition to multiply
a) 3×2
b) 6×4
c) 4×3
d) 5×3
e) 8×2

      Complete
a) $2 + 2 + 2 + 2 =$ _____ x _____
b) $4 + 4 + 4 =$ _____ x _____
c) $3 + 3 + 3 + 3 + 3$ _____ x _____
d) $8 + 8 + 8 =$ _____ x _____
e) $3 + 3 + 3 =$ _____ x _____

      REMARKS

LESSON 40
SUB TOPIC :   DIVISION

CONTENT :   DIVISION AS REPEATED SUBTRACTION
Example
1. $12 \div 3$
    $12 - 3 = 9$ count the number of times you subtract 3 division from the
    $9 - 3 = 6$ dividend until you get "o" is the answer
    $6 - 3 = 3$
    $3 - 3 = 0$

          $\therefore 12 \div 3 = 4$ times

ACTIVITY : EXERCISE 3l page 53 (MK new edition)

LESSON 41
SUB TOPIC : DIVISION WITH OUT REMAINDER

CONTENT

Example (a)   8 ÷ 4 = 2   (b)   12 ÷ 3 = 4

(c)
$$\begin{array}{r} 1\ 1 \\ 2\ \overline{\smash)\ 2\ 2} \end{array}$$
1 x 2 = - 2
2
1 x 2 =   - 2 = 11

(d)
$$\begin{array}{r} 3\ 2 \\ 3\ \overline{\smash)\ 9\ 6} \end{array}$$
3 x 3 = - 9
6
2 x 3   - 6   = 32

(e)
$$\begin{array}{r} 1\ 2\ 0\ 1 \\ 4\ \overline{\smash)\ 4\ 8\ 0\ 4} \end{array}$$
1 x 4 - 4
2 x 4   8
- 8
0 x 4   0
0
4
- 4

= 1201

(f)
$$\begin{array}{r} 0\ 4\ 0\ 4 \\ 3\ \overline{\smash)\ 1\ 2\ 1\ 2} \end{array}$$
0 x 3 = -0
1 2
4 x 3 = 1 2
- -
1
0 x 3 =   - 0
1   2
4 x 3 =   - 1   2
-    - = 4 - 4

ACTIVITY : (a) EXERCISE 3m page 53 (Mk new edition)

(i)	6 ÷ 2	(iv)	96 ÷ 3	(viii)	2424 by 4
(ii)	10 ÷ 5	(v)	602 ÷ 2	(ix)	219 by
(iii)	18 ÷ 9	(vi)	966 ÷ 3		
(iv)	24 ÷ 2	(vii)	1515 by		

b)   Divide
c)   Share 48 mangoes among 4 girls
d)   Share 106 sweets between 2 boys

LESSON 42

SUBTOPIC   :   DIVISION WITH REMAINDERS

CONTENT   :   Division with remainders but putting a zero to keep a place

Example I   Example II
Division   1 7 2
                                                     2/   3 4 5
                                                          -2
                                                           1 4
                                                          -1 4
                                                           - - 5
                                                            - 4
                                                             1
                                                                172 rem 1

ACTIVITY
Divide the following
          (v)   625 by 3.
          (vi)   6247 by 2.
          (vii)   999 by 4.

LESSON 43
SUB TOPIC :   DIVISION BY 10S

CONTENT: Division by 10s
Example I   example ii
650 ÷ 10   420 ÷ 10
= 650   =   420
   10   10
= 65   =   42

ACTIVITY
EXERCISE 3 (0) NUMBERS 1 – 12
MK BK PAGE 54.
REMARKS
SUBTOPIC: AVERAGE
CONTENT:
Example: Work out the average of 3, 0 and 6
              Average = sum of items = 3 + 0 + 6 = 9 = 3
                        No. of items   3   3

Activity:
   1) Find the average of 2, 3 and 1
   2) Work out the average of 4 and 6
   3) Find the average of 2, 5, 5, 1 and 7
   4) Work out the average of 9, 0 and 6.
   5) Find the average of the first three even number.

LESSON : 44

SUB-TOPIC :   WORD PROBLEMS

CONTENT:
Example: Share 2 4 6 books among 6 pupils. How many books does each pupil get?

```
              0 4 1
        6   | 2 4 6 |
  0 x 6 = -0  ↓
              2 4
  4 x 6 = -2 4    ↓
                    6
  1 x 6 =      -  6
              -           = 41
```

∴ Each pupil will get 41 books

2. There are 120 oranges in 2 bags. How many oranges are in each bag
    Divide

```
                  0 6 0
          2   | 1 2 0
   0 x 2 = -0
                1 2
   6 x 2 = 1  2
              -  -  0
   0 x 2 =          0   = 60
```

∴ Each bag contains 60 oranges.

ACTIVITY :   Exercise 3p page 55 MK Bk4 new edition.
REMARKS

LESSON 45

TOPICAL QUESTIONS (OPERATION ON NUMBERS)
1(a) Add: 3 + 7   (b) 2 + 6 + 8   (c) 7 - 3   (d) 9 - 3 - 2
2.   Add :   1403 + 549
3.   Find the difference between 9 4 7 and 1 0 2 4
4.   Work out:
   a) 6 x 3   b)   4 x 3 x 2   c)   6   d)   3   4   e) 7 3 2
                                                 x 2   x   2   x   3
                                                 _____   _____   _____

   f)   1 0 0   g)   3 1 4   h)   1 2
          X   2   x   5   x 1 3
          _____   _____   _____

1. Divide:

a) 8 ÷ 2   b)   39 ÷ 3

d) 2 ⟌26   e)   3 ⟌ 162

2. Share 246 books among 6 pupils.
3. The cost of 1 pen is 250/=. Find the cost of 4 similar pens.
4. Subtract 99 from 108
5. Kapere planted 314 trees on Monday and 678 more on Tuesday. How many trees did he plant altogether.

LESSON 46
TOPIC: TYPES OF NUMBERS

CONTENT   :   TYPES OF NUMBERS
   Definitions:
- Counting numbers: They are numbers which we use to count.
                  Examples of counting numbers include 1 ,2,3,4,5,6,7,8,…
- Whole numbers: They are number which begin with zero e.g. 0 , 1 , 2 , 3 , 4 , 5
- Even numbers: They are numbers when divided by 2 leave no remainder e.g.
                  0,2,4,6,8,10, 12 …..
- Odd numbers: They are numbers when divided by 2 leave remainder 1 e.g 1, 3, 5, 7, 9, 11, 13 ………….

ACTIVITY
Exercise 40, 4b, 4c and 4d pages 58 – 60 New MK

REMARKS.
LESSON 47
SUBTOPIC :   Number Sequence

CONTENT : NUMBER SEQUENCE BY ADDING
Examples
   i) By adding one:

1,   2,   3,   4,   5,   6,   7,   8,   9,   10

+1 + 1 + 1 +   1 + 1 + 1 + 1 + 1 + 1

   ii) By adding twos

0,   2,   4,   6,   8,   10,   12,   14

+2 + 2 + 2 + 2 + 2 + 2 + 2
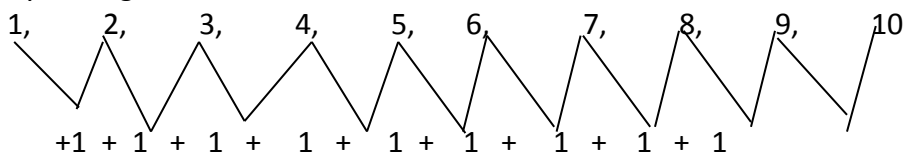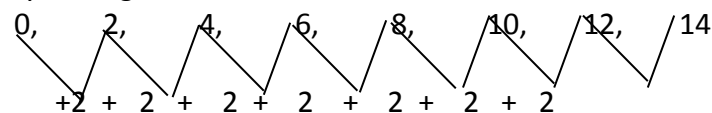
   iii) By adding one or two

1,   2,   4,   5,   7,   8,   10

+1 + 2 + 1 + 2 + 1 + 2
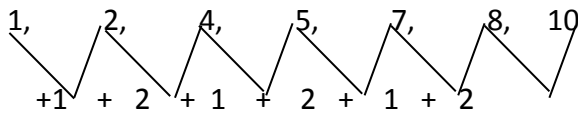
iv) By adding counting numbers.

1,   2,   4,   7,   11,   16

+1 + 2 + 3 + 4 + 5

ACTIVITY

Find the missing numbers in the following

i)   1, 3, 5, 7, 9, _____

ii)   5, 9, 12, 14, _____

iii) 3, 6, 9, 12, 15, _____

iv)   1, 3, 7, 13, _____

v)   5, 10, 15, 20, 25, _____

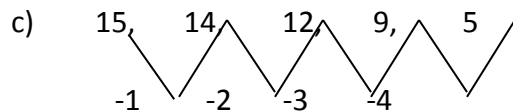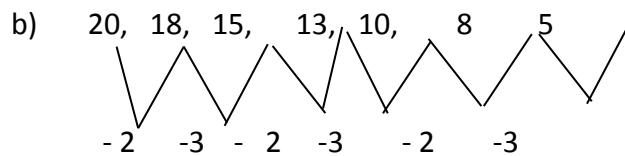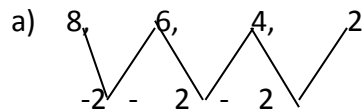vi)   1, 2, 4, 7, 11, 16, _____

vii) 8, 10, 13, 15, _____

REMARKS

LESSON 48

SUBTOPIC : NUMBER SEQUENCES

CONTENT :   Number sequence by subtracting

Examples

a)   8,   6,   4,   2

-2 - 2 - 2

b)   20, 18, 15,   13, 10,   8   5

- 2   -3 - 2   -3   - 2   -3

c)   15,   14,   12,   9,   5

-1   -2   -3   -4

ACTIVITY

Find the missing numbers in the following

I)   9, 7, 5, _____

II) 18, 16, 12, _____ 6, 4

III) 16, 13, 10, 7, _____

IV) 22, 18,   16,   10, _____

REMARKS
LESSON 49

TOPIC : NUMBER PATTERNS AND SEQUENCE

SUB TOPIC: Multiples
A multiple is a product got by multiplying or counting number by the same number.

Example:
List the multiples of

1 x 4 = 4	4 x 4 = 16
2 x 4 =8	5 x 4= 20
3 x 4 =12	6 x 4 = 24

{4, 8, 12, 16, 20, 24, …..} are multiples of 4

ACTIVITY Exercise 4e page 60 MK bk4 (old edition)

REMARKS.

LESSON : 50

SUB TOPIC : COMMON MULTIPLES AND L.C.M

CONTENT
Examples
1. Find the first common multiples of 2 and 4
2. M_2 = {2,4,6,8,10,12,14,16,18,…}
3. M_4 = {4, 8, 12, 16, 20, 24……….}
   Common multiples = { 4, 8, 12}
∴ L.C.M = 4

2. Find the L.C.M of 4 and 5
   M_4 = {4, 8, 12, 16, 20, 24, 28}
   M_5={5, 10, 15, 20, 25, 30, …..}
  Common multiples = { 20}'
 . L.C.M is 20

ACTIVITY : find the L.C.M of
a) Find the common multiples of 4 and 6 less than 30.
b)
   i)   3 and 4
   ii) 4 and 6
   iii) 3 and 5
   iv) 4 and 8

LESSON 51
SUBTOPIC: **Multiplying by** 1**0, 100, 1000, 10000**

CONTENT: **This case, we simply place the number of zeros to the number.**
Example
 6 x 10 = 60
7 x 100= 700
8x 1000=8000
38 x 100 = 3800

ACTIVITY Exercise 4n Mk Primary mathematics page 69

REMARKS.

LESSON 52

SUBTOPIC : MULTIPLYING BY MULTIPLES OF 10

CONTENT
Example I
What is 7 x 30
7 x 30 = ?
    30 = 3 x 10
 So   7 x 30 = 7 X 3 x 10
           = 21 x 10
           = 210.

Example II
What is 50 x 30
   50 x 30 =   5 x 10 x 3 x 10
             = 5 x 3 x 10 x 10
              = 15 x 100
              = 1500

ACTIVITY
Exercise 4(0) page 70 MK Primary maths bk 4 page 70.

REMARKS

LESSON 53
 SUBTOPIC :   Dividing by multiples of 10

CONTENT
We divide by cancelling

Example : Divide 6000 by 30

$$\frac{6000}{30} = 200$$

Example ; Share 2100 mangoes among 70 children 2100 ÷ 70

ACTIVITIES
Exercise 4q page 71 Mk primary mathematics Book 4 page 71.

REMARKS.

LESSON : 54

SUB TOPIC : Listing factors.

CONTENT
Factors are given pairs of numbers you multiply together to get a multiple/product. It is also a number that divides exactly into another number.

Example I
1. Which two numbers do we multiply to get 12?
    F_{12} = 1 x 12 = 12
    2 x 6 = 12
    3 x 4 = 12

    F_s = 1, 2, 3, 4, 6, 12
2. List down all the factors of 16
    F_{16} = 1 x 6 = 16
            2 x 8 = 16
            4 x 4 = 16
            1, 2, 4, 8, 16

    F_{16} = 1, 2, 4, 8, 16
3. How many factors has 6
    F_6 = 1 x 6
       = 2 x 3
    F_6 = 1, 2, 3, 6
    ∴ 6 has 4 factors

4. Write the number of factors 18 has.

F_{18} = 1 x 18

      = 2 x 9

      = 3 x 6

      = 1, 2, 3, 5, 9, 18

∴ 18 has 6 factors

ACTIVITY : Exercise 4s page 73 Mk Bk4 and 4t (new edition).

LESSON 55

SUBTOPIC : COMMON FACTORS AND G.C.F/H.C.F

CONTENT: **COMMON FACTORS**

Examples.

a)list down common factors of 4 and 6

  F4   1 x 4   F6   1 x 6

       2 x 2   2 x 3

 F4 = {1, 2, 4 }   F6 = { 1, 2, 3, 6}

Common factors = { 1, 2}

b) Find the Greatest Common Factors of 6 and 8

    F6   1x 6   F8   1 x 8

           2 x 3   2 x 4

      F6= { 1, 2, 3 ,6}   F8 = {1, 2, 4, 8}

Common factors = {1, 2,}

 G.C.F of 6 and 8 is 2

ACTIVITY :

List down common factors of

- 8 and 10
- 20 and 10
- 9 and 15

2. Find the G.C.F of

- 15 and 20
- 4 and 8
- 16 and 12

REMARKS

LESSON 56

SUB-TOPIC :Divisibility tests for 2, 5 and 10

CONTENT   :   DIVISIBILITY TEST FOR 2

A number is divided by 2 if its last digit is an even number i.e 0, 2, 4, 6, 8

Divisibility test for 5
A number is divisible by 5 if the last digit is either 0 or 5 for example 20 65 and so on.

Divisibility test for 10
A number is divisible by 10 if its last digit is 0 for example 30, 70, 800 and so on.

ACTIVITY
Selected numbers from Exercise 4t, 4u and 4v Mk Primary Mathematics (old edition) page 72 – 73

REMARKS.

LESSON 57
SUB-TOPIC : MAGIC SQUARES

CONTENT : Procedure: First find the sum of three given digits arranged in columns or rows or diagonals.
In this case, the number are in the diagonal 7, 4 and 1.

7	a	5
b	4	c
3	d	1

Magic sum = 7 + 4 + 1 = 12

Find a
$a + 7 + 5 = 12$
$a + 12 - 12 = 12 - 12$
$a = 0$
$a = 0$

Find b
$b + 7 + 3 = 12$
$b + 10 - 10 = 12 - 10$
$b = 2$

Find C
$C + 5 + 1 = 12$
$C + 6 - 6 = 12 - 6$
$C = 6$

Find d
$d + 3 + 1 = 12$
$d + 4 - 4 = 12 - 4$
$d = 8$

.
. . a = 0   b = 2   c = 6   d = 8

ACTIVITY
Fill in the missing numbers

7	a	5
2	4	C
b	8	8

a =_____

b = _____
c = _____

.

2	9	a
7	b	3
6	c	d
a	8	3
6	b	2
5	c	7

a =_____

b = _____

c = _____

a =_____

b = _____

c = _____

.

.

8	1	6
a	s	b
4	c	d

a = _____

b = _____

c = _____

.

LESSON 58
TOPICAL QUESTIONS ON NUMBERS FACTS AND SEQUENCES.

1. List down the first 4 counting numbers
2. Find the sum of the first 3 even numbers.
3. Complete the following
a) 1, 3, 5, 7, 9, _____
b) 40, 38, 36, 34, _____

4. List down the first 7 multiples of 5.
5. Find the first three common multiples of 2 and 3
6. Find the L.C.M of 4 and 6.
7. Find the first three common factors of 12 and 18
8. Which of the following are divisible by 2? 5, 4, 8, 11, 430, 721
9. Which of the following is divisible by 5? 54, 5, 15, 72, 904, 800?
10. List down all factors of
    a) 24   b)   15

11. Find the H.C.F of
a) 4 and 8
b) 3 and 6

12. Find the missing numbers

8	1	6
d	5	c
4	e	f

c = _____

d = _____

e= _____

f _____

LESSON 60.

TOPIC   :   FRACTIONS

SUBTOPIC   :   REVISION OF P.3 WORK

CONTENT   :   Definition
A fraction is part of a whole.
Naming fractions and writing in words.

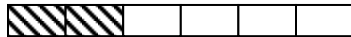.   1   a whole
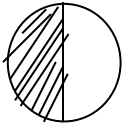
                                    ½   a half
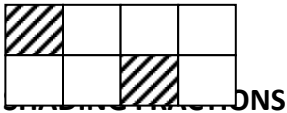
                                    $^2/_8$ two eighths.

SHADING FRACTIONS

Shade $^4/_6$

Shade $^2/_3$ of

$^2/_3$ x 6 =   2 x 2= 4

Shade $^1/_3$ of
$^1/_3$ x 6 = 1 x 2 = 2
Types of fractions:- Proper / Simple / Common fractions.
                      - Improper fractions.
                     - Mixed fractions

ACTIVITY : EXERCISE 8q page 95 – 96 (MK bk 3)

LESSON 61

Subtopic   :   Equivalent fractions.
Content   :   Finding equivalent fractions
We can use the knowledge of multiples: We can find equivalent fractions by multiplying numerators and denominators by the same number.

Example : find equivalent fractions for $^2/_3$

$$^2/_3 \quad = \quad \frac{2 \times 2}{3 \times 2} = \frac{4}{6} \quad , \qquad\qquad \frac{2 \times 3}{3 \times 3} = \frac{6}{9} \quad , \qquad \frac{2}{3} = \frac{2 \times 4}{3 \times 4} = \frac{8}{12} \text{.........}$$

$$\therefore \,^2/_3 = \{ \underline{4}, \underline{6}, \underline{8}, \underline{10} \text{ ....}\}.$$
$$\qquad\quad 6 \quad 9 \quad 12 \quad 15$$

ACTIVITY

(i) List the first 5 equivalent fractions for

a) $^1/_3$, b) $^2/_5$, c) ½ d) ¼ $^4/_7$

(ii) Find the next equivalent fraction for:

a) ¼ , b) $^2/_7$, c) ¾

REMARKS

LESSON 62

TOPIC : **FRACTIONS**

SUBTOPIC : **EQUIVALENT FRACTIONS**

CONTENT : FINDING MISSING NUMERATORS AND DENOMINATORS

Examples

i) $\dfrac{1}{2} = \dfrac{\boxed{}}{6}$

$$6 \div 2 = 3$$
$$\frac{1 \times 3}{2 \times 3} = \frac{3}{6}$$

$$\therefore \boxed{} = 3$$

ii) $\dfrac{3}{5} = \dfrac{\boxed{}}{20}$

$$20 \div 5 = 4$$

$$\underline{3 \times 4 = 12}$$

IV) $\dfrac{4}{\boxed{}} = \dfrac{12}{15}$

$$12 \div 4 = 3$$
$$\frac{4}{\boxed{}} \times \frac{3}{\times 3} = \frac{12}{15}$$

5 X 4   20

∴ ☐ = 12

x ☐ 15 (5 X 3 = 15)

∴ ☐ = 5

v)   ☐ = $\frac{8}{28}$
     7

28 ÷ 7 = 4

☐   X $\frac{4}{4}$ = $\frac{8}{28}$
7

☐   x 4 = 8 (2 x 4 = 8)

∴   = 2

iii) $\frac{3}{5}$ = ☐ $\frac{y}{20}$

20 5 = 4
$\frac{3 \times 4}{5 \times 4}$ = $\frac{12}{20}$

∴   ☐ 12

ACTIVITY
Exercise 5b Mk bkl 4 pages 77.

REMARKS

LESSON 63

Subtopic   :   Reducing fractions

Content :

Example
  a. Reduce $\frac{6}{12}$ to its lowest term

  $\frac{6}{12}$ = $\frac{6 \div 2}{12 \div 2}$ = $\frac{3 \div 3}{6 \div 3}$ = $\frac{1}{2}$

When there is no whole number which can exactly divide both the numerator and denominator, then the fraction is in its lowest term.

  b) Write $\frac{4}{8}$ in its lowest terms

  $\frac{4}{8}$ = F_4 = { 1, 2, 4}

8

$F_8 = \{ 1, 2, 4, 8\}$

H.C.F   =   4

$$\frac{4}{8} \div \frac{4}{4} = \tfrac{1}{2}$$

ACTIVITY : Exercise 5d page 84 Mk bk 4 (new edition)

REMARKS
LESSON 64

SUBTOPIC :   Comparing fractions without using a number line.

CONTENT :   COMPARING FRACTIONS WITHOUT USING A NUMBER LINE.

Example

A. Which is greater?

i)   ¼   or   ½   ii)   ½   or $^2/_3$

$\frac{1}{4} = \boxed{^2/_8}$ $\frac{1}{2} = {}^2/_4 = \boxed{^3/_6} = {}^6/_9$

$\frac{1}{2} = {}^{2}/_4 = {}^3/_6 = \boxed{^4/_8}$ $^2/_3 = \boxed{^4/_6} = {}^6/_9$

$\therefore$ ½ is greater $^2/_3$ is greater

b) Arrange starting with the largest fraction

i)   ½ , $^2/_3$, $^1/_6$ ii) $^1/_3$,   ½ $^1/_5$

$\frac{1}{2} = {}^2/_4 = {}^3/_6 = {}^4/_8, = {}^5/_{10} \ldots\ldots$ $^1/_3 = {}^2/_6 = {}^3/_9 = {}^4/_{12} = {}^5/_{15} = {}^6/_{18} = {}^7/_{21}$

$^2/_3 = {}^4/_6 = {}^6/_9$ $^8/_{24} = {}^9/_{27} = {}^{10}/_{30}$

$^2/3 = {}^4/6 = {}^6/9$ $\frac{1}{2} = {}^2/_4 = {}^3/6 = {}^4/8 = {}^5/10 = {}^6/12 = {}^8/14 = {}^{15}/30$

$^1/_6 = {}^2/_{12}$ $^{10}/_{20} = {}^{11}/_{22} = {}^{12}/_{24} = {}^{13}/_{26} = {}^{14}/_{28} = {}^{15}/_{30}$

$^2/_3$, $^3/_6$ $^1/_6$ $^1/_5$ = $^2/_{10}$ = $^3/_{15}$ = $^4/_{20}$ = $^5/_{25}$

½ , $^1/_3$ $^1/_5$

ACTIVITY : Exercise 5e nos. 1 – 15 Mk bk 4 page 81
REMARKS.
LESSON 65

Subtopic: Addition of fractions with different denominators

Content :

Rev : Workout :   (a) $^1/_3$ + $^1/_3$ = $^2/_3$

b)   Add : $\underline{2}$ + $\underline{5}$ = $\underline{7}$

7   7   7

= 1

Examples

Method 1: <u>Using equivalent fractions</u>.

Add: ½ + $^1/_3$

Rename ½ and $^1/_3$ so that their denominators are the same.

then ½ = { $^2/_4$, $^3/_6$, $^4/_8$ ....}

$^1/_3$ = { $^2/_6$, $^3/_9$, $^4/_{12}$......}

∴ ½ + $^1/_3$ = $^3/_6$ + $^2/_6$

= $\underline{3 + 2}$

6

= $^5/_6$

Method 2: <u>Using the L.C.M:</u>

Work out: ½ + $^1/_3$

Find the L.C.M of 2 and 3 to be the common denominator

M_2 = { 2 , 4 , 6 , 8.......} M_3 = {3 , 6 , 9.........}

Then $\underline{x1}$ + $\underline{x1}$ = $\underline{(3 \times 1) + (2 \times 1)}$

÷2   ÷3   6

= $\underline{3 + 2}$

6

= $\underline{5}$

6

1. I gave $^2/_5$ of my land to John at first and added him $^1/_5$ what fraction did he have altogether?

2. I ran $^2/_3$ of my journey and walked $^2/_5$. What was the total fraction of the journey did I cover?

   I ran   - $^2/_5$ = $^2/_3 + ^2/_5$ = $\underline{^2/_3 + 15 + ^2/_5 \text{ x } 15}$
                                                                                  15

   I walked   - $^2/_5$ = $\underline{2 \text{ x } 5 + 2 \text{ x } 3}$ = $\underline{10 + 6}$
                                                              15   15

   ACTIVITY :   Exercise 5g and 5 h
   Page 87 – 88 Mk bk4 (New edition)

   REMARKS

LESSON 66

   SUBTOPIC   :   Subtraction of fractions with different denominators.
   CONTENT: Revision examples: (i) $\underline{2}$ - $\underline{1}$ (ii) $\underline{4}$ - $\underline{1}$ (ii) $\underline{7}$ - $\underline{2}$
                                                      3   3   5   5   10   10

   Revision:

   Examples:
   a) ¾ - $^2/_3$

      Get equivalent fractions of each fraction.

      $\underline{9}$ - $\underline{8}$ = $\underline{9}$ - $\underline{8}$ = $\underline{1}$
      12   12   12   12   12

b)   Akello had 5/6 of a cake. She gave away ¼ to her best friend. What fraction remained?
Solution
$\underline{5}$ - $\underline{1}$
6   4
Get equivalent fractions for each in order of question.
$\underline{5}$ = $\underline{5}$ $\underline{10}$ $\underline{15}$ $\underline{20}$ $\underline{25}$ $\underline{30}$ ....
6   6   12   18   24   30   36

¼ = $\underline{1}$ $\underline{2}$ $\underline{3}$ $\underline{4}$ $\underline{5}$ $\underline{6}$ $\underline{7}$
      4   8   12   16   20   24   28

Use the L.C.D fraction

$$\frac{10 - 3}{12} \quad = \quad \frac{10 - 3}{12} \quad = \frac{7}{12}$$

ACTIVITY : Exercise 5 o page 95 (Mk new edition)
Remarks.

LESSON 67

Sub topic: Changing mixed numbers to improper fractions
Content:
An improper fraction is a fraction whose denominator is smaller than the numerator e.g $\frac{7}{2}$
A mixed number is a number with a whole number and a common fraction e.g $6\frac{2}{5}$
When changing a mixed number into an improper fraction we use.

$\underline{\text{Denominator x whole number + Numerator}}$ or $\underline{(D \times W) + N}$
                      Denominator   D

Examples:
Change $6\frac{2}{5}$ into an improper fraction

$6\frac{2}{5}$ = $\dfrac{D \times W + N}{D}$ D =   5

                  W=   6

        $\dfrac{(5 \times 6) + 2}{5}$ N =   2

= $\dfrac{32}{5}$

ACTIVITY
Exercise 5i Mk primary Mathematics (old edition) page 85.

LESSON 68
Sub topic : Changing improper fractions to mixed numbers

Content
Example
Express $\frac{8}{3}$ as a mixed number
8 ÷ 3

                          2 rem 2

$$3 \quad 8\overline{\smash{\big)}}$$
$$3 \times 2 = \quad \underline{6}$$
$$2$$
$$^8/_3 = 2\,^2/_3 \text{ Ans.}$$

Example

Change $\underline{17}$ into a mixed number
5

$$\begin{array}{r} 3r\,2 \\ 5\,\overline{\smash{\big)}\,17} \\ 3\times5 = -\underline{15} \\ 2 \end{array} \qquad \begin{array}{l} 3\,r\,2 \\ \\ 3\,^2/_5 \end{array}$$

ACTIVITY

Exercise 5K page 92 Mk primary Mathematics Book 4 (new edition)

LESSON 69

SUBTOPIC: Addition of mixed fractions

CONTENT: Addition of mixed fractions with same denominators.

Examples

1. Add: $1\,^1/_3 + 4\,^1/_3$
    = $(1 + 4) + (\,^1/_3 + \,^1/_3)$
    = $5 \quad + \underline{(1 + 1)}$
    3
    = $5 \quad + \quad ^2/_3$
    = $5^2/_3$

ii) $2\,^1/_7 + 3\,^5/_7$
        $= (2 + 3) + (^1/_7 + \,^5/_7)$
        $= 5 \quad + \underline{(1 + 5)}$
        7
        $= 5 \quad + \quad ^6/_7$
        $= \quad 5^6/_7$

Iii) $3\,¼ + 2\,¾$
        $(3 + 2) + (¼ + ¾)$
        $= 5 + \underline{(1 + 3)}$
        4
        $= \quad 5 + \underline{4}$

                4
    = 5 + 1
        =   6

ACTIVITY

Exercise 5K page 86 Mk bk 4 page 86

Exercise 8 page 63 oxford primary maths bk 4 63.

LESSON 70

Sub topic :   Addition of mixed fractions.

Content   :   Addition of mixed fractions with different denominators.

Examples:

        Add: 2½ + 3¼

                =(2 +3) + (½ + ¼)

                =   5   + (2x1) + (1x1)
                                      4

                =   5   +   3 + 1
                                    4

                = 5 + ¾

                = 5¾

Activity:

        1. $2^1/_3$ + $1^1/_5$ =

        2. $4^1/_6$ + ¾ =

        3. $3^2/_5$ + $1^1/_3$ =

        4. $5^1/_7$ + $3^1/_3$ =

LESSON 71

Sub topic: Finding the remaining fraction.

Content   :

Examples:

1.   Maishara ate 4/5 of an orange. What fraction remained?

                1 - $^4/_5$

            = $^5/_5$ - $^4/_5$

            = 5 - 4
                  5

            = $^1/_5$

    $^1/_5$ remained.

2.   Mariam used 3/20 of the water in the Jerrycan for bathing.
      What fraction was left?

      $1 - \frac{3}{20}$

= $\frac{20}{20} - \frac{3}{20}$

= $\frac{20 - 3}{20}$

= $\frac{17}{20}$

Activity:

    1.   Juma painted $\frac{7}{10}$ of his house on Monday, what fraction of his house
          has not been painted?
    2. $\frac{1}{3}$ of the people in a family are adults. What is the fraction for
          children?

LESSON 72

Sub topic :   Subtraction of mixed numbers

Content: Subtraction of mixed fractions with the same denominators.

Example
1.   Subtract $4\frac{3}{5} - 2\frac{1}{5}$

          = $(4 - 2) + \frac{3}{5} - \frac{1}{5})$

          = $2 + \frac{(3 - 1)}{5}$

      = $2 + \frac{2}{5}$

          = $2\frac{2}{5}$

    1. Rebecca had a piece of material $10\frac{2}{5}$ metres long. She made a gomesi for
        Esther, her sister with $7\frac{1}{5}$ metres. Ho w long was the cloth she was left with?
        Soln   :   she had $10\frac{2}{5}$ metres
                        Used $7\frac{1}{5}$ metres

        = $10\frac{2}{5} - 7\frac{1}{5}$

        = $(10 - 7) + (\frac{2}{5} - \frac{1}{5})$

        = $3 + \frac{(2 - 1)}{5}$

        = $3 + \frac{1}{5}$

        = $3\frac{1}{5}$

        Activity : Exercise 5l page 86 Mk Bk 4 (old edition)

LESSON 73

Sub topic :   Subtraction of mixed fractions.

Content   : Addition of mixed fractions with different denominators

Example:

$$8\tfrac{4}{5} - 3\tfrac{1}{2} = (8 - 3) + (\tfrac{4}{5} - \tfrac{1}{2})$$
$$= 5 + \frac{(2 \times 4) - (5 \times 1)}{10}$$
$$= 5 + \frac{8 - 5}{10}$$
$$= 5 + \tfrac{3}{10}$$
$$= 5\tfrac{3}{10}.$$

Activity:

Subtract: (1) $7\tfrac{3}{4} - 4\tfrac{2}{3}$
(2) $4\tfrac{5}{6} - 1\tfrac{1}{2}$
(3) $1\tfrac{1}{4} - 1\tfrac{1}{5}$
(4) $2\tfrac{1}{2} - \tfrac{1}{4}$

LESSON 74

Sub topic: Fraction of a group

Content:

Examples:

(a) What is ¾ of 12 goats?

¾ of 12

= ¾ x 12

= 3 x 3

= 9 goats.

b) What is ½ of 24?

½ of 24

= ½ x 24

= 1 x 12

= 12

Activity: Exercise 5q Page 97 (MK New Edition)

Remarks

LESSON 75
Sub topic: Application of fractions.
Content:
Examples:
There are 14 children in a taxi: $^2/_7$ of them are boys.
a) How many boys are in the taxi?

$^2/_7$ of 14
= $^2/_7$ x 14

= 2 x 2
= 4 boys

b) How many girls are in the taxi?

```
  1   4
-     4
  1   0 girls
```

c) What is the fraction of girls in the taxi?

$1 - ^2/_7$
= $^7/_7 - ^2/_7$
= $\dfrac{7 - 2}{7}$
= $^5/_7$

Activity:
1.   There are 15 pupils in P.4 $^2/_5$ of them area girls. The rest are boys.
      a) How many girls are in the class?
      b) How many boys are the class?
      c) What is the fraction of boys in the class?

2. There are 10 people in play. $^3/_5$ of them are men.
    The rest are women.
        a) What is the fraction of women in the play?
        b) How many women are in the play?
        c) How many men are in the play?
Remarks:

CONTENT: A reciprocal is a number when multiplied by a given fraction gives 1.

Example

Find the reciprocal of

a) $^5/_7$ $\underline{5}$ x $\underline{7}$ = $\underline{35}$ = 1   b) $^3/_2$ $\underline{3}$ x $\underline{2}$ = $\underline{6}$ = 1
         7   5   35   2   3   6

   ∴ Reciprocal = $\underline{7}$ ∴ Reciprocal of $\underline{3}$ = 1
                 5   2

   The reciprocal of $^5/_7$ is $^7/_5$.   The reciprocal of $^3/_2$ is $^2/_3$

ACTIVITY

Find the reciprocal of:

   a) $^3/_7$ c) $^{12}/_8$
   b) $^5/_{11}$ d) $^8/_3$

LESSON : 76

Subtopic :   Multiplication of fractions.

Content :   When multiplying fractions, we use
         Numerator x Numerator in   short it is N x N
         Denominator x Denominator   D x D

Examples :

1. $^1/_5$ x $^2/_3$ (ii)   ¾ x $^8/_{10}$
      N x N   Here reduce denominators and numerators using
      D x D   common factors.

= $\underline{1 \text{ x } 2}$ = $\underline{3}$ x $\underline{1}$
      5 x 3   1   5

= $\underline{2}$ N x N
     15   D x D

                  = $\underline{3 \text{ x } 1}$
                    1 x 5
                  = $\underline{3}$
                    5

Activity:

1. $\underline{2}$ x $\underline{1}$ (4) $\underline{3}$ x $\underline{2}$ (7) $\underline{1}$ x $\underline{1}$
      3   2   4   5   3   3

2. $\dfrac{1}{3}$ x $\dfrac{1}{2}$ (5) $\dfrac{1}{2}$ x $\dfrac{1}{2}$ (8) $\dfrac{1}{4}$ x $\dfrac{1}{4}$

3. $\dfrac{2}{5}$ x $\dfrac{10}{12}$ (6) $\dfrac{4}{5}$ x $\dfrac{3}{8}$

LESSON 77
TOPICAL QUESTIONS ON FRACTIONS.

1. Add :   3/7 + 2/7 =
2. Shade $^3/_3$ of
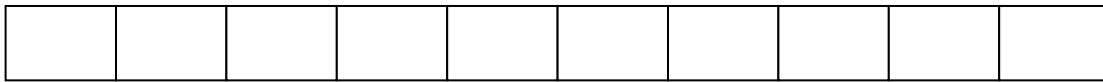
3. Find the first 3 equivalent fractions for
   a) $^2/_5$ b) $^1/_6$
4. Find the missing number

   $\dfrac{2}{4}$ = $\dfrac{\Box}{16}$

5. Reduce 4/12 to the lowest terms.
6. Use >, <, or =
   a) ½ - 2/3
   b) $^2/_3$ - $_1/_6$
   c) $^2/_3$-   - $^6/_9$
7. Add the following
   $^2/_3 + ¼$
8. Subtract
   $_1/_4$ - $^1/_3$

9.   Find the reciprocal of the following:
   a) $\dfrac{2}{3}$ b) $\dfrac{3}{8}$ c) $\dfrac{7}{3}$ d) $\dfrac{1}{6}$ e) $\dfrac{5}{2}$

10(a) Arrange the following fractions in ascending order
   $\dfrac{1}{5}$, $\dfrac{1}{2}$, $\dfrac{1}{4}$

   b)   Arrange the following fractions in ascending order.
   $\dfrac{1}{2}$, $\dfrac{3}{4}$ and $\dfrac{5}{6}$

SIR APOLLO KAGGWA SCHOOLS
P.4 TERM II

LESSON 1
SUBTOPIC   :   Decimal fractions

Content   :   Definition :
A decimal fraction is a part of a whole shown by a decimal point.
writing (decimals fractions) in words

Examples

a) Write 0.4 in words: Four tenths or zero point four.
b) Write 2.47 in words- Two and forty seven hundredths.
c) Write 23.14 in words-   Twenty three and fourteen hundredths.
ACTIVITY : EXERCISE 5r page Nos 1- 22 (MK New edition)

LESSON 2

SUBTOPIC   :   Writing decimals in figures

CONTENT   :

Examples
a) Thirty three and four tenths.
b) Thirty three   3   3
Four tenth   +   0 . 4
                    3   3 . 4

b)   Twelve hundredths
    12   =   0 . 12
    100

c) Five hundred twenty and six tenths.
    Five hundred twenty   5   2   0
    Six tenths   +   0.   6
                                     5   2   0.   6

ACTIVITY : EXERCISE :   5(s) page 99 (MK New edition)

LESSON 3

SUBTOPIC: Expressing fractions as decimals

CONTENT
Examples

I.   Express $\underline{3}$ as a decimal
                    10

$\underline{3}$ =
 10

$\underline{0 . 3}$
   10 │ 30
0 x 10 = -0
              30
3 x 10   - $\underline{30}$
              - -

∴ $\underline{3}$ = 0.3
   10

ii) Express $\underline{24}$ as a decimal.
                 100

$\underline{24}$ =
 100   0.24
                        ────
              100 │24
              0x100-0
     2 x 100 =   240

     2x100 = $\underline{200}$
                  400
     4 x 100 =   - $\underline{400}$
                  - - -

∴ $\underline{24}$ = 0.24
   100

Example III
            ½ =

                $\underline{0.5}$
              2│1
       0 x 2-$\underline{0}$
               10
       5 x 2 - $\underline{10}$

            ∴ ½   = 0.5

ACTIVITY :   Exercise 5r page 093 Mk old editions.

LESSON 4

SUBTOPIC: EXPRESSING DECIMALS AS COMMON FRACTIONS

Example a) change 0.3 into a common fraction.

0. 3 = $^3/_{10}$

b) 0. 4   = $\dfrac{4}{10}$

c) 0.24   = $\dfrac{24}{100}$

ACTIVITY :   Exercise 5 U page 100 MK BK 4 (new edition)

LESSON 5

SUBTOPIC : **Adding decimal fractions**.
Content   : (i) Adding decimal fractions using the numberline.

Example (i) Add: 0.2 + 0.5
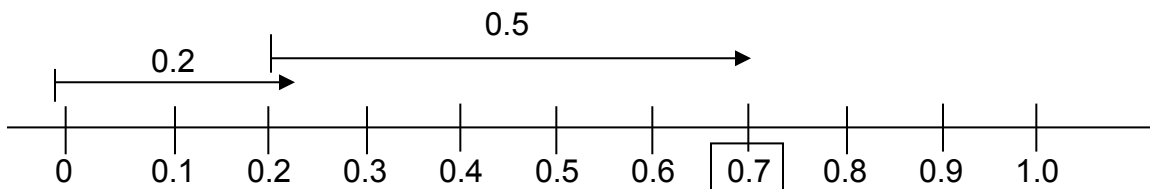
∴ The sum of 0.2 and 0.5 on the number line is 0.7.

Example(ii) Add without using the number line.
0.2 + 0.5 (Arrange vertically according to place value).

```
   0 . 2
 +0 . 5
   0 . 7
```

(iii) **Word Problems**

Example 1: I ate 0.2 of a cake in the morning and o.7 of it in the evening. What decimal fraction did I eat altogether?

```
    0 . 2
 +  0 . 7
    0 . 9
```

Example 2 : A pupils drank 3.9 litres of milk on Monday and 8.4 litres on Tuesday. How many litres of milk were drunk altogether?

Monday ……………….. 3 . 9
Tuesday……………... +8 . 4
12 . 3 litres

ACTIVITY: Exercise 5x   Pg 102 and Exercise 5z I Pg 104

Remarks

LESSON 6

SUBTOPIC : Adding decimal fractions:

CONTENT : Adding decimal fractions using the abacus.

Example 1 (A) Without carrying:

Add 1.3 + 2.6
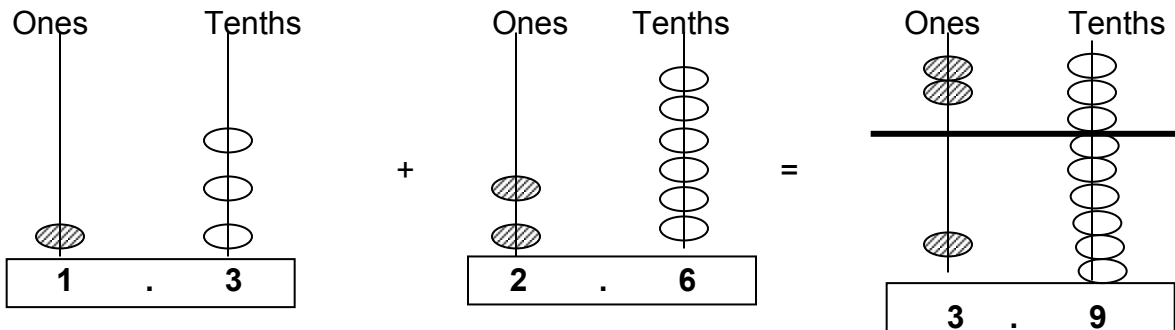
Example 2 (B) While carrying

Add   1.4 + 2.8
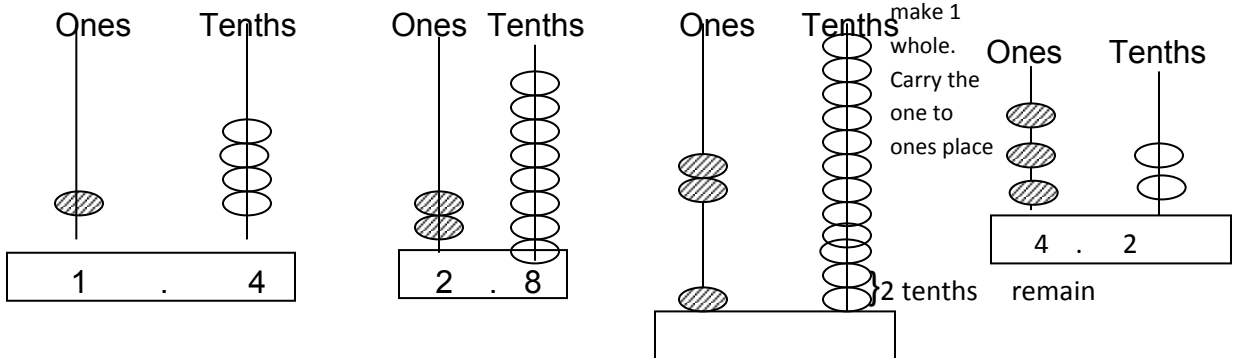
ACTIVITY (A) Draw the abacus to show these additions below:

1. 3.2 + 4.6   4.   0.4 + 5.3

2. 1.1 + 2.7   5.   7.1 + 2.0

3. 2.3 + 3.2   6.   2.1 + 3.1

(B) Use the abacus to work out the following decimal fractions.

(1) 1.3 + 1.9   (3)   2.8 + 3.2

(2) 1.7 + 1.6   (4)   0.9 + 0.8

<u>Remarks</u>

LESSON 7

SUBTOPIC : Subtraction of decimal fractions.

CONTENT i. Using a number line

Example   0.5 - 0.3
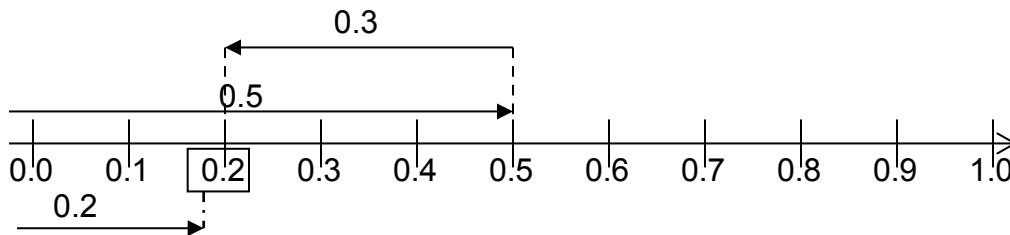
∴ 0.5 - 0.3 = 0.2

ii.   <u>Using abacus method</u>

Example 3.7 - 1.4
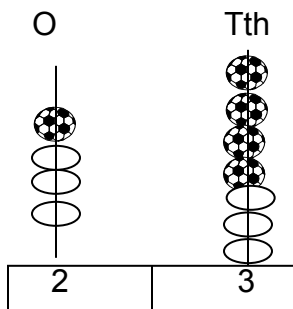
∴ 3.7 - 1.4 = 2.3

iii.   <u>Subtracting decimals without using number lines and abaci.</u>
Examples:

(a)   3.3 - 1.8

$= 3 . 8$
$- 1 . 6$
_____
$2 . 2$

(c)   3 . 3
-1 . 6
_____

(b)   4 . 2 - 1 . 8

$= 4 . 2$
$- 1 . 8$
_____
$2 . 4$

iv.   <u>Word problems.</u>
Examples:

1.   Aisha had 7.2 metres of a string. She sold 3.5 metres. What length of the string did she remain with?

She had   7.2 metres

She sold   -   <u>3.5 metres</u>

She remained with <u>3.7 metres</u>

2.   Musoke bought 10 litres of cooking oil.

He gave away 4.5 litres. How many litres of cooking oil did she remain with?

He bought   10.0 litres

He gave away   <u>-4. 5 litres</u>

He remained with   <u>5.5 litres</u>

ACTIVITY: Exercise 5z5, 5z6, 5z8 and 5z9 (MK – New Edition pag 111)
REMARKS:

LESSON 8

SUBTOPIC : Writing decimals
CONTENT : (a)   Writing decimals as mixed fractions.

Examples
1.   Write 1.5 as a common fraction.
A common fraction is a fraction which has a numeration and a denominator.
Therefore $1.5 = 1 + \dfrac{5}{10} = 1\dfrac{5}{10}$

2.   Write 12.9 = 12 + $\underline{9}$ = $\underline{9}$
                              10   10

b) Writing mixed fractions as decimals.

Examples:
i.   Change $1\frac{7}{10}$ to decimal fraction.

$1\frac{7}{10}$ = 1 + $\frac{7}{10}$

= 1 + 0.7

= 1. 0
  +0 . 7
  1 . 7

ii.   Change $2\frac{4}{10}$ to decimal.

$2\frac{4}{10}$ = 2 + $\frac{4}{10}$

= 2 + 0.4
= 2 . 0
 +0 . 4
  2 . 4

ACTIVITY: Exercise 5W (MK - New Edition Page 101)

LESSON : 9

SUBTOPIC : Ordering decimal fractions.
CONTENT :

i.   Arranging decimal fractions using a number line.

(a) Arranging from the smallest to the biggest (largest) – Ascending order or increasing

order.

Example:

Arrange the following decimals in ascending order.

0.7 , 0.2 , 0.4

(1)
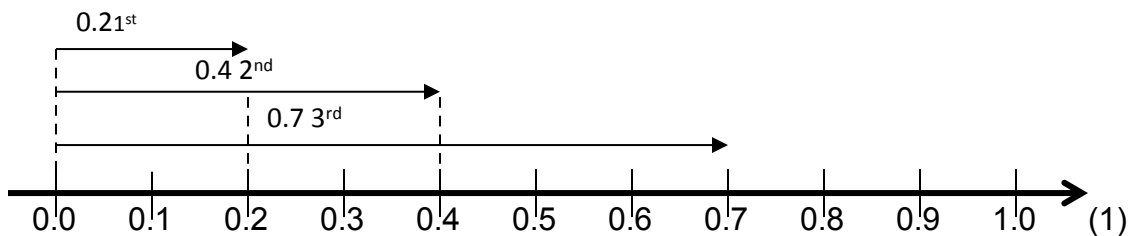
The arrows are shorter with smaller decimal fractions e.g 0.2

The arrows are longer with bigger (longer) decimal fractions e.g 0.7

∴ Ascending order of the decimals is : 0.2 , 0.4 ,0.7

ii.   Arranging decimal fractions without using a number line.

      (b) Arranging from the biggest (longest) to the smallest. Descending order or decreasing order.

<u>Example:</u>

Arrange 0.4 , 4 , 0.04 beginning with the biggest.

0.4 ^{2nd} $= \dfrac{4}{10}$,

4 ^{1st} $= \dfrac{4}{1}$

0.04 ^{3rd} $= \dfrac{4}{100}$

The largest denominator is taken as the L.C.M

In this case the L.C.M = 100.

Multiply each fraction by 100.

$0.4 = \dfrac{4}{10} \times 100$

    $= 40$

$4 = \dfrac{4}{1} \times 100$

    $= 400$

$0.04 = \dfrac{4}{100} \times 100$

    $= 4.$

Comparing the products, the largest one shows the largest decimal and the smallest product shows the smallest decimal.

∴ Descending order is 4 , 0.4 , 0.04

ACTIVITY: Exercise 5Y page 97 MK Bk (Old Edition)

REMARKS:

LESSON: 10

TOPIC : GRAPHS AND TEMPERATURE

Subtopic: Pictographs and bar graphs
            Definition:

Graph; A graph is a diagram representing information in an organized manner
Examples of graphs

Content   : (a) Pictographs are also called picture graphs. They are diagrams representing
               information using pictures.
               To draw a pictograph, we use symbols. The symbols may represent one on
                more   items.
               The symbol and all the items it represents is called a scale.

Example

Stands for 5 trees. How many trees are in

One tree stands for 5 trees
3 trees stand for (5 x 3) trees
3 trees stand for 15 trees.

0. The graph below show the number of balls picked by four sisters from a shop.

⚾ ⚾ ⚾ ⚾ ⚾ ⚾	Doreen
⚾ ⚾ ⚾ ⚾	Diana
⚾ ⚾ ⚾ ⚾ ⚾	Daphine
⚾ ⚾	Daizy

        Scale ⚾   represents 8 balls
  a) Who picked the largest number of balls ?

  b) Who picked the smallest number of balls?

  c) How many balls did Diana pick?

  d) If each costs shs. 1000, how much would Doreen pay?

ACTIVITY : Exercise 6b page 116 Mk bk 4 (New edition)

(b) Bar graphs:- They are diagrams representing information using bars.
                The bars can be drawn vertically or horizontally.

The graph below shows the daily attendance of P.4 pupils for a week
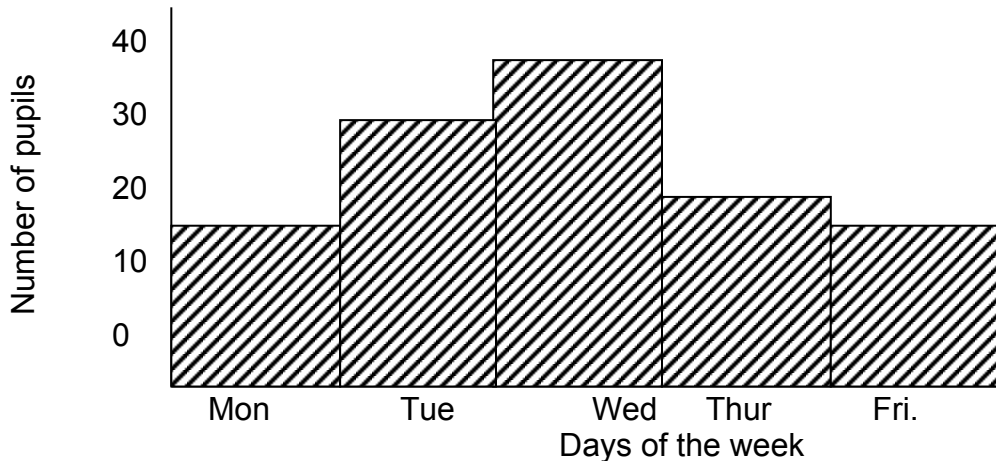
a) How many pupils were present on Thursday?

b) On which day were the same number of pupils present?

c) On which day was the biggest number of pupils present?

d) How many pupils were present on Monday and Thursday?

ACTIVITY :   Activity 6g page 113 Mk bk 4 (old edition)

LESSON 11

SUB TOPIC : Tally graphs
           Tally graphs are diagrams that represent information using symbols called tallies.

Content   : i. To draw tally graphs, we first collect information. We may draw tallies and use them to count and group things in fives.
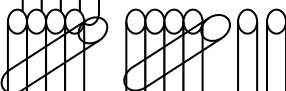
           ii. Tallies are used to count and group things or objects as follows:
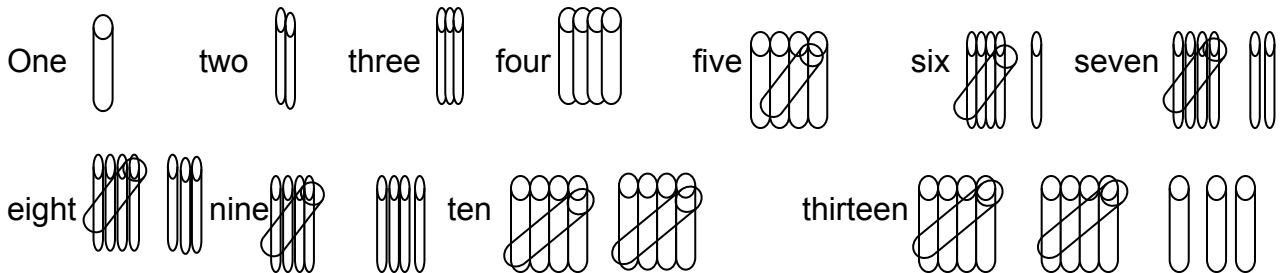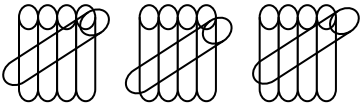
iii.   Writing tally marks using tallies.
         Examples:
a)   = 4
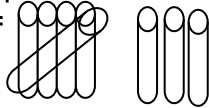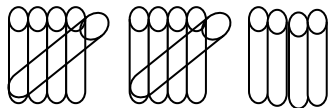
b)   = 12
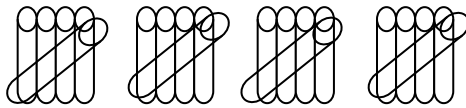
c) = 15

iv.   Making tally marks to represent these numbers.

Examples
a) 8 =

b) 14 =

c) 20 =

ACTIVITY : Exercise 6a and 6b page 106 – 107 MK Old Edition

REMARKS:

LESSON 12

SUBTOPIC : Tallies and tables.

CONTENT: (a) Drawing tables.
               Tallies and tables
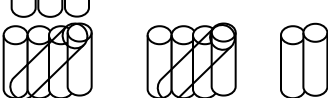
Examples
1.   Pupils in P.4 were given in a Math test and scored the marks that were represented by the tallies as shown below:

Peter:

Diana:

Tom:

Mary:
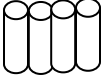
Draw a table and represent the information shown by the given tallies.

NAME	Peter	Diana	Tom	Mary
TALLY MARKS	4	8	3	12

(b) Making tallies

2.   Show the given information on the table below using tallies.

Days of a week	MON	TUE	WED	THUR	FRI
n(EGGS)	4	0	7	11	16

DAYS OF A WEEK	NUMBER OF EGGS	TALLIES
MON	4	
TUE	0	
WED	7	
THUR	11	
FRI	16	

ACTIVITY : Exercise 6c page 108 MK Old Edition
REMARKS:
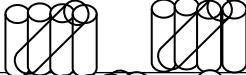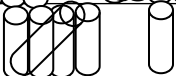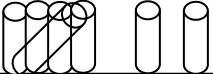
LESSON 13
SUBTOPIC : Tallies and bar graphs

Content   : Tallies and bar graphs
        (a) Drawing bar graphs from tally graphs
Examples
1.   Four children in a group bought sweets from a shop.
        Each one's sweets were recorded in tally from as shown below:

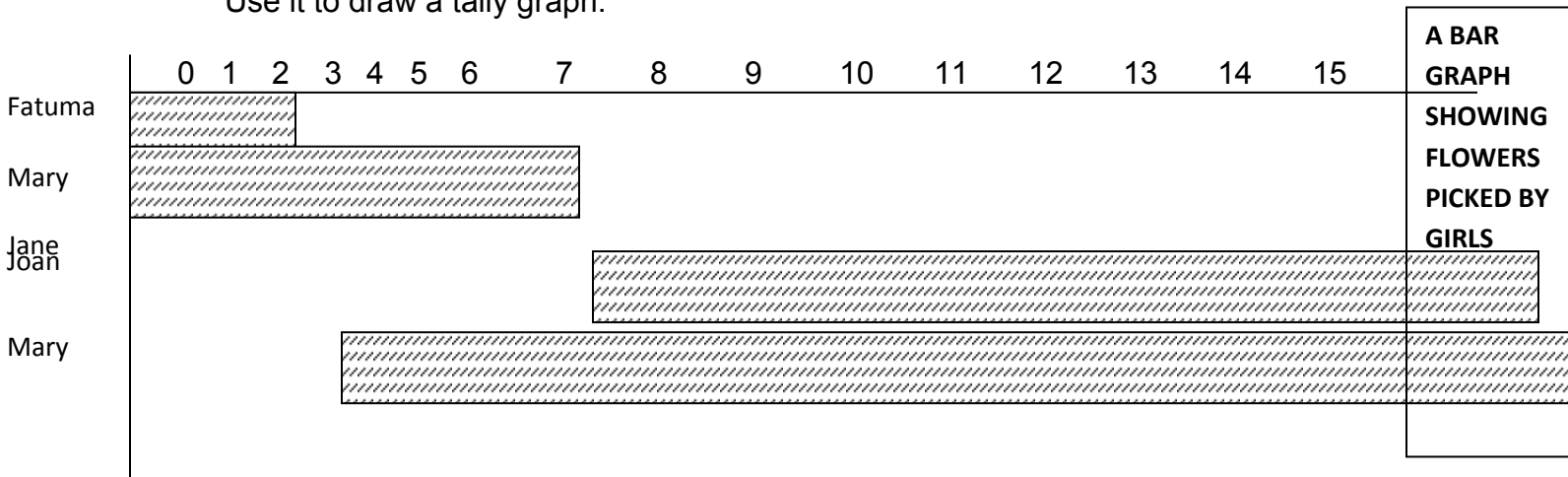| NAMES	TALLIES
Doreen	
Sam	
Joan	
Paul	

Draw a bar graph using the above tallies.

A BAR GRAPH SHOWING SWEETS BOUGHT BY THE CHILDREN.
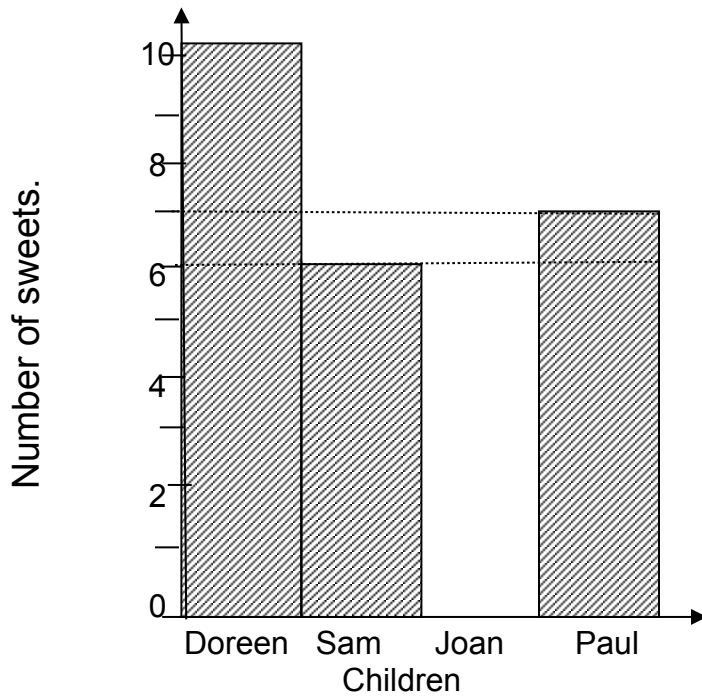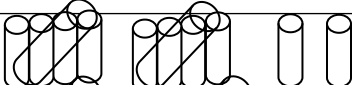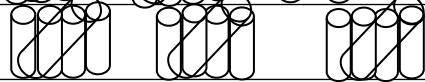

b) **Making tallies from bar graphs.**

Example:
ii. The bar graph below shows the number of flowers picked by five girls.
Use it to draw a tally graph.

A BAR GRAPH SHOWING FLOWERS PICKED BY GIRLS

A TALLY GRAPH SHOWING FLOWERS PICKED BY GIRLS.

NAMES	TALLIES
Fatuma	
Mary	

Jane	
Joan	
Mary	

ACTIVITY : Exercise 6d page 109 (Mk Old edition).
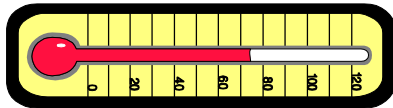
Remarks:

LESSON 14

SUB TOPIC   :   Temperature

CONTENT   :   Definition

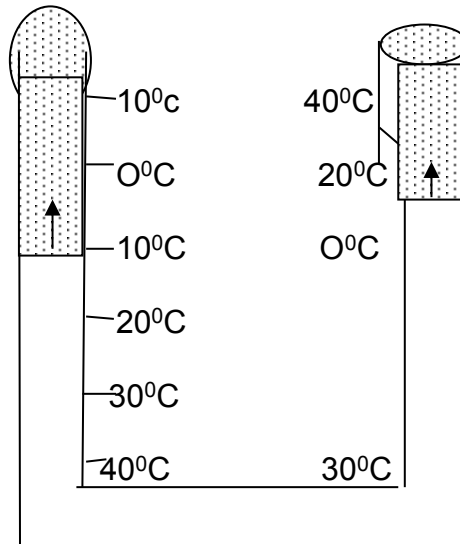Temperature is the degree of hotness or coldness of an object.

Temperature is measured in <u>degrees</u> and it is written as ^0C or ^0F.

(i) Reading temperature on the thermometers.
 - clinical thermometer.

<u>The temperature is 67^0C.</u>

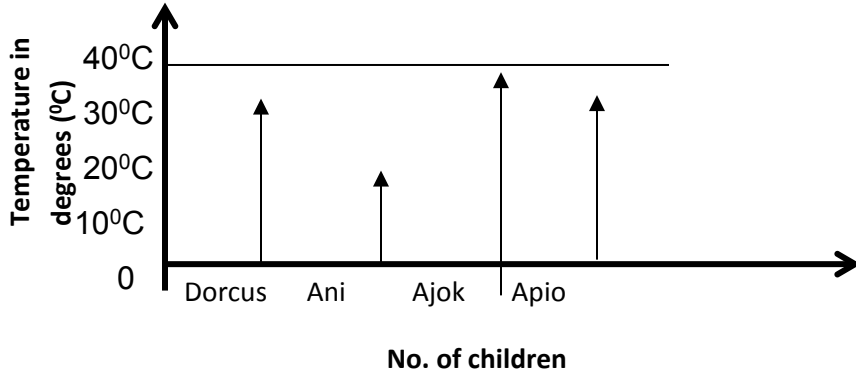Maximum and minimum thermometer

Minimum   _____
Maximum   _____

From above (i) the Maximum temperature = 40^0C

(ii) the Minimum temperature = 20^0C

(iii) Temperature graphs.

The graph below shows the temperature of four girls.

No. of children

a) Who had the highest temperature?

   Ajok had the highest temperature.

b) What was the lowest temperature recorded?

   20^0C

ACTIVITY : Exercise 6(j) , 6(K) and 6(i) page 116 – 119 (Mk Old edition).

Remarks:

Lesson 15:

TOPICAL QUESTIONS FOR GRAPHS AND INTERPRETATION OF TEMPERATURE

1. If [figure] stands for 15 pupils, how many pupils are in [figures]

2. A boy counted Red and Blue cars daily for a week and recorded the findings as shown below.

THE GRAPH BELOW SHOWS THE NUMBER OF CARS COUNTED FROM MONDAY TO FRIDAY.

	Red car	Blue car
MONDAY		
TUESDAY		
WEDNESDAY		
THURSDAY		
FRIDAY		

a) On which day was the same number of cars counted?
b) What was the least number of red cars counted in the week?
c) How many red cares were counted on Wednesday?
d) How many more red cares than blue cars were counted on Friday?

THE GRAPH SHOWS MANGOES EATEN BY FIVE CHILDREN
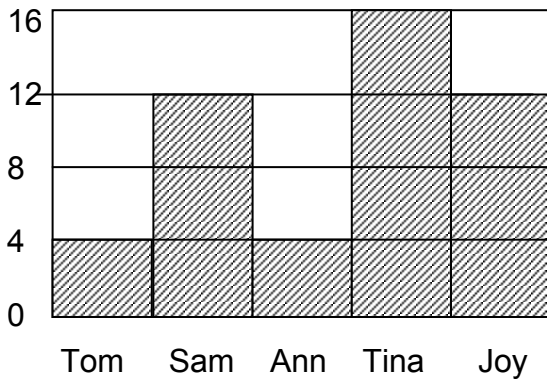
(a)   How many oranges were eaten by Tom, Sam and Anna?

(b)   How many children ate the same number of mangoes?

(c)   How many mangoes did all the children eat?

LESSON 16

TOPIC   :   ALGEBRA

SUBTOPIC   :   USING LETTERS FOR NUMBERS

CONTENT   :   (i) Revision: find the missing numbers in the box.

Example   1:   ☐ + 3 = 9   Example 2:   ☐ - 4 = 6

☐ = 9 - 3   ☐ = 6 + 4

☐   = 6.   ☐

= 10

Oral discussion: Find the missing numbers in the box:

          Exercise (A)   Exercise (B)

1.   ☐ + 2 = 9   1.   ☐ - 3 = 5

2.   ☐ + 3 = 8   2. - ☐ 6 = 4

3.   ☐ + 6 = 11   3.   ☐ - 7 = 10

(ii) Using the unknown:

   The unknown is any letter of the English alphabet.

   Find P: Find X:

Example 1.   P + 5 = 11   Example 2:   6 + x = 15

        P + 5 - 5 = 11 - 5   6 + x = 15

  Subtract 5 from each side   **Subtract 6 from each side**

        P   = 6 Ans.   6 – 6 + x = 15 – 6

                                                   x   = 9 Ans.

Example 3. Find m: Example 4: find k:

   m – 3 = 7   k – 1 = 0

   m – 3 = 7   k – 1 = 0

Add 3 to each side   Add 1 to each side

   m - 3 + 3 = 7 + 3   k - 1 + 1 = 0 + 1

   m   = 10 Ans.   k   = 1 Ans.

ACTIVITY : Exercise 16c No. 1 -10 Pg 246 Mk (New Edition)
               Exercise 16e no. 1 – 10 Pg 247 MK (New Edition)

REMARKS.

LESSON 37

SUBTOPIC :   Using letters for numbers.

                    (i) Adding letters for numbers.

Example   Work out (a) $p + p$

$$P + p = 2p.$$

           (b) $4y + y$

$$4y + y = 5y.$$

           (c) $3a + a + 2a$

$$= 6a.$$

           (d) Find the perimeter of the figure below.
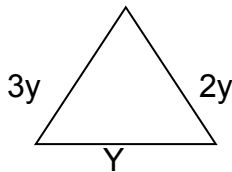
$$P = s + s + s$$
$$p = 3y + 2y + y$$
$$= 6y.$$

ACTIVITY : Exercise 16f page 248 (Mk new edition)
              Exercise 16i page 250.

REMARKS.

LESSON 18

SUBTOPIC : Using letters for numbers.
           (ii) Subtracting letters for numbers.

Example: Work out   (a) $2a - a.$
$$2a - a = a.$$

            (b) $5y - 2y$
$$5y - 2y = 3y$$

      (iii) Adding, and Subtracting letters for numbers.
        Workout (a) $3a + a - 2a$
$$4a - 2a = 2a.$$

(b) 2y - 3y + 4y
2y + 4y - 3y
6y - 3y = 3y.

LESSON 18

SUBTOPIC : COLLECTING LIKE TERMS
CONTENTS
Learners collect numbers with like terms
e.g   x + y + x + 3y + x
       (x + x + x) + 3y + y
              3y + 4y

ACTIVITY : Subtract the following:

a)   7k + 2k
b)   10p - p
c)   2y + 3y - 4y
d)   k + 2k - k
e)   p - 3p + 4p

REMARKS:

LESSON 19.

SUB TOPIC :   collecting like terms

CONTENT   :   (i) Involving addition.

Examples: (a)   Collecting like term x + y + x + 3y + x
                     (x + x + x) + (3y + y)
                            3x + 4y.
             (b)   2k + 4m + k + 3d + m
                     (2k + k) + (4m + m) + 3d
                            3k + 5m + 3d.

ACTIVITY : Exercise 13 c page 242 Mk bk 4 (old edition)

REMARKS.

LESSON 20

SUBTOPIC   : Collecting like terms.

CONTENT   : Involving subtraction and addition.

Example   (a) work out 4k + n - k

                     4k - k + n

$$\underline{3k + n.}$$

(b) 2m + 4k - m - 2k

    2m - m + 4k - 2k

      $\underline{M + 2k.}$

(c) 3y - 2x - y

    3y - y - 2x

    $\underline{2y - 2x..}$

ACTIVITY : Exercise 16k page 252, Mk primary mathematics (New Edition)

REMARKS:

LESSON 21

SUBTOPIC   : Subtraction (1) with Addition and Subtraction.

CONTENT   :   To substitute is to replace.

Example   Given that a = 4   b = 3   and c = 6

Find a) a + c   b) a - b   c) a + b - c

=   4 + 6   4 - 3   4 + 3 - 6

=   10   1   7 - 6

ACTIVITY : Exercise 16n page 253, Mk primary mathematics (New Edition)

LESSON 22

SUBTOPIC: SUBSTITUTION (2) WITH MULTIPLICATION)

CONTENT
Interprete
2y means 2 x y
Xy means Xxy
Abc means a x b x c

Example
Given that a = 4   b= 3   and c= 5
Find

1) 3a   3a= 3 x a   ii) abc   iii)   ca
              = 3 x 4   = a xb x c   = c x a
              =12   = 4 x 3 x 5   = 5 x 4
                           = 60   = 20

ACTIVITY

Exercise 16(0) Mk primary Mathematics page 254 bk 4 (New edition)

REMARKS.

LESSON 23

SUBTOPIC: SUBSTITUTION III (MULTIPLICATION AND ADDITION/SUBTRACTING)
CONTENT

Example

a = 4 and b = 3

find 4a + 2b

    = (4x a) + (2 x b)

    = (4 x 4) + (2 x 3)

    = 16 + 6

    = _ 22_

example

2a + b

= (2 x a) + b

= (2 x 4) + 3

 = 8 + 3

 = <u>11</u>

Example

3a – 2b

= (3xa) – (2 x b)

= (3 x4) – (2 x 3)

= 12 – 6

= _6_

ACTIVITY

Given that a = 3, b = 4 and c = 5

Find

a) 5a _ 2b

b) 6c – 4a

c) 2c – b

d) 3b + a

e) A _ 2b

f)   6a – 2b

g)   3b – 2c

h)   4b – c

i)   2c – 2b

REMARKS

LESSON 24

SUB TOPIC: SUBSTITUTION (IV) (with division)

CONTENT

Example

Given that a = 3 b= 4 and c = 6

Find a) $\frac{b}{2}$ = b ÷ 2

         = 4 ÷ 2 = 2

b) $\frac{a + c}{3}$ = $\frac{3 + 6}{3}$ = $\frac{9}{3}$ = 9 ÷ 3 = 3

c) $\frac{2a + 2b}{2}$ = $\frac{2 \times 3 + 2 \times 4}{2}$

             = $\frac{6 + 8}{2}$

$$= \quad \frac{14}{2} \quad 4 \div 2$$

ACTIVITY
Given that X = 4 y = 6 and Z = 8
Find

a) $\quad \frac{Z}{x}$

c) $\quad \frac{Z}{4}$

b) $\frac{2y + 3x}{y}$

d) $\quad \frac{y + Z + X}{y}$

REMARKS.

LESSON 25

SUBTOPIC : EQUATIONS

CONTENT : ADDITION IN EQUATIONS (Lower work)

Examples

| ☐ | + | 3 | = | 9 |

☐ + 3 - 3 = 9 - 3

☐ = 6

2). 4 + y = 10
     4 – 4 + y = 10 – 4
           Y = 6

ACTIVITY : Exercise 13g page 245 (Mk old edition).

LESSON : 26

SUBTOPIC : SOLVING FOR UNKNOWN (SUBTRACTION)

CONTENT(Lower class)
Learners will solve for unknowns in the equations.
e.g

a) ☐ - 3 = 5   b) y – 4 = 7

☐ - 3 + 3 = 5 + 3   y – 4 + 4 = 7 + 4

☐ = 8   y = 11

c) $5 - y = 2$

What number is subtracted from 5 to get 2

$y = 5 - 2$

$\underline{Y = \quad 3}$

ACTIVITY: Exercise 13 h page 246 Mk bk4 (old edition)

REMARKS.

LESSON 27

SUBTOPIC : MULTIPLICATION IN ALGEBRA

Example

1) $3 \times y = 12$

$3y \quad = 12$

$\underline{3y} \quad = \underline{12}$

$3 \qquad 3$

$\underline{y = \quad 4}$

3) $13t \quad = 26$

$13t \quad = 26$

$\underline{13t} \quad = \underline{26}$

$13 \qquad 13$

$\underline{t = \quad 2}$

ACTIVITY : Exercise 13j page 247 (MK old Edition)

REMARKS.

LESSON 28

Subtopic : solving for unknown in division.

CONTENT:

Learners will find unknown in the equations involving division.

e. g   a) $x \div 3 = 2$

$x \quad = 2 \times 3$

$\underline{x \quad = 6}$

b) $\dfrac{x}{3} = 2$

$x \quad = \quad 2 \times 3$

$\underline{x \quad = \quad 6}$

c) $36 \div x = 9$ (What number can be divided by 36 to give 9)

$x = \dfrac{36}{9}$

$\underline{\quad = 4}$

ACTIVITY: Exercise 13k page 248 Mk bk 4 (old edition)

REMARKS.

LESSON 29

SUBTOPIC : MIXED EQUATIONS (ADDITION)

CONTENT:
Examples

i) $2y + 3 = 15$
$2y + 3 - 3 = 15 - 3$
$\dfrac{2y}{2} = \dfrac{12}{2}$
$Y = 6$

ii) $4p + 1 = 17$
$4p + 1 - 1 = 17 - 1$
$\dfrac{4p}{4} = \dfrac{16}{4}$
$p = 4$

ACTIVITY
Solve these equations
a) $5m + 2 = 12$

b) $7p + 1 = 15$

c) $3q + 3 = 21$
f) $2 + 4p = 10$

c) $4m + 5 = 25$

d) $2p + 2 = 20$

e) $6y + 1 = 13$

REMARKS.

LESSON 30

SUBTOPIC: MIXED EQUATIONS (SUBTRACTION)

CONTENT:
Examples

l) $4p - 2 = 10$
$4p - 2 + 2 = 10 + 2$
$\dfrac{4p}{4} = \dfrac{12}{4}$
$P = 3$

ii) $6p - 1 = 17$
$6p - 1 + 1 = 17 + 1$
$\dfrac{6p}{6} = \dfrac{18}{6}$
$P = 3$

ACTIVITY :
Solve these equations
a) $2y - 3 = 5$
b) $3m - 2 = 13$

c) $6p - 1 = 23$
d) $10y + 1 = 21$

REMARKS.

LESSON 31

SUBTOPIC: FORMING AND SOLVING EQUATIONS

CONTENT : addition and subtraction of equations.

Examples.
1. Think of a number add three to it the answer is 14. What is the number? Let the No.
   be y.

   Y + 3 = 14
   Y + 3 – 3 = 14 – 3
   Y = 11

   The number is 11

2. Think of a number subtract 3 from it my answer is 17. What is the number?
   Let the No. b n

   N – 3 = 17
   N – 3 + 3 = 17 + 3
   N = 20
   The number is 20

   ACTIVITY :   Exercise 16t and 16u pages 257 and 258 (Mk new edition).

   REMARKS.

LESSON 32
SUBTOPIC **: FORMING AND SOLVING EQUATIONS**

CONTENT : MULTIPLICATION AND DIVISION OF EQUATIONS.
Examples.

There are 4 groups in a class. Each group has the same number of pupils. Altogether there are 40 pupils. How many pupils are in each group?

Solution
Let the number of pupils in each group be by

   4 x y   = 40
   4y   = 40
   4y   = 40
   4   4
   Y   =10
Therefore: 10 pupils are in each group.

2. A parent had some money and shared it among 6 children. Each child got sh. 500. How
   much money was it?
Solution

Let the amount of money be C
 C ÷ 6 = 500
C ÷ 6 x 6 = 500 x 6
C = 3,000/=
It was 3000/=

Or
$\dfrac{C}{6}$ = 500

6 x $\dfrac{C}{6}$ =   500 x 6

C=   3000/=

ACTIVITY : Exercise 16 V NOS. 1 – 4 page 259.
                    Exercise 16w Nos. 1 – 4 page 260.

REMARKS.

LESSON 33:

TOPICAL QUESTIONS FOR ALGEBRA

1. Write in short y + y + y + y =
2. Simplify
    a) N +M = 2n + 4M
    b) 4t + 7y – 3t.
3. Given that a = 2, b= 4, C = 6
Find ;
a) a + b – c
b) 2a + b
c) 3a + 2c
d) ac – 2b
e) 2c + 3b
    2a

4. Work out
a)   x + 3 = 7   b)   y – 4 = 10
c)   6y = 36   d)   w ÷ 6 = 2

5.   Solve for unknowns
a)   5m + 2 = 12
b)   2y – 3 = 5

6.	I think of a number when I add 3 to it the result is 7. What is the number?

LESSON : 34

**TOPIC:	GEOMETRY**

SUBTOPIC	: Definitions: -	Plane figures (shapes)
- (i)	A plane shape is a shape with a flat surface. A closed figure or shape with many sides is called a Polygon.
- (ii)	A triangle is a three sided figure.
- (iii)	An equilateral triangle is a triangle with all of its sides equal.
- (iv)	An Isosceles triangle is a triangle with two of its sides equal.
- (v)	A circle is a round figure.

Content:

Examples
- ➢ Triangles (equilateral, isosceles, scalene, right angled).
- ➢ Quadrilaterals (Rectangle, square, Rhombus, trapezium parallelogram, kite)
- ➢ Circles are semicircle, Quadrant (A quarter a circle)
- ➢ Ovals

ACTIVITY :   Draw and name the above shapes.
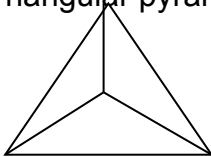

LESSON 35

**SUBTOPIC :	Solid shapes**

ContentExample s
Draw the following shapes
- a) Cone

- b) Cube

b)	cylinder

d)	Cuboid

2)	Name the following solid shapes

a) Triangular pyramid

c) rectangular pyramid.
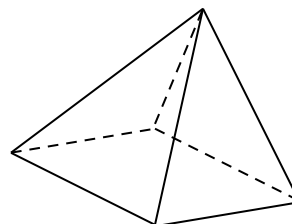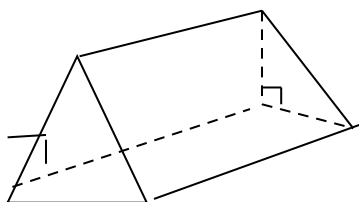
b) Triangular prism   d) Square   pyramid
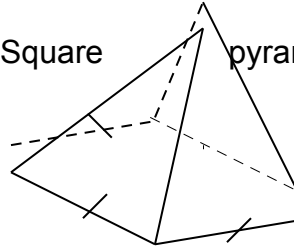
ACTIVITY   :   Draw and name the shapes.

LESSON 36

SUBTOPIC : Naming parts of solid shapes

CONTENT
Example   a) Cuboid;
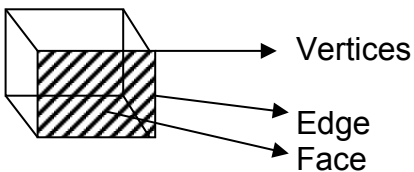
 → Vertices   a) A cuboid has 6 rectangular faces.
                                                        8 vertices.
→ Edge   12 edges.
→ Face   A cuboid or a cube without a cover has 5 faces.

b)   Cube;
        A cube has 6 square faces.
        8 vertices.
        12 edges.

ACTIVITY
Name and count the edge and vertices of faces
   ➢ Cuboid.
   ➢ Cone.
   ➢ Cylinder.
   ➢ Rectangular pyramid.
   ➢ Triangular pyramid.
   ➢ Square pyramid.
   ➢ Triangular prism.

LESSON 37

SUBTOPIC: Making circles

Content : Making circles using hard paper, strings and big toes.

A circle
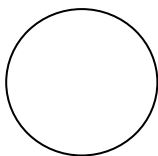
   i.   **Using hard paper**:

Cut outs are made using razor blades, round objects and hard paper.

ii.   Strings:

A string tied on a fixed object e.g pencil and a drawing paper is used.

iii.   Big toes:

A toe is moved round a fixed point on the ground using a heel of a foot.

ACTIVITY : Making cuts outs and drawing circles using strings and toes.

Remarks:

LESSON 38

SUBTOPIC: Making circles

Content : Making circles using a pair of compasses.

A circle
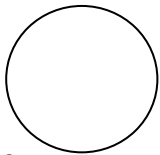
A pencil fixed in the pair of compasses is moved round a fixed point on a paper using a pair of compasses.

ACTIVITY : Drawing different sizes of circles using pairs of compasses.

Remarks:

LESSON 39

SUBTOPIC: Lines of a circle.

Content : Lines of a circle.
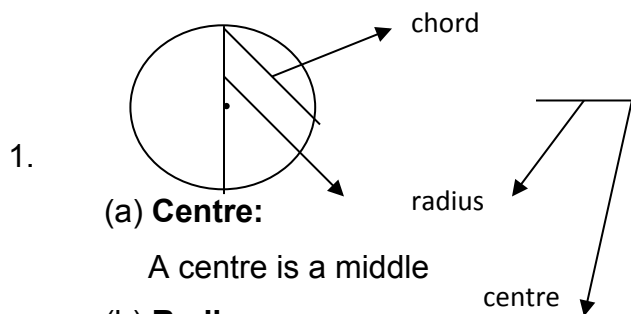
1.   Definitions:

(a) **Centre:**

A centre is a middle   par of a circle.

(b) **Radius**:

A radius is a line running from the centre to the edge of a circle.

(c) **Diameter**:

A diameter is a line running the edge of a circle to another passing through its centre.

(d) **Chord:**

A chord is a line joining any two points of a circle.

The chord may pass through the centre of a circle or not.

The longest chord of a circle is called a diameter.

(e) **circumference:**

Circumference is the distance around a circle.

ACTIVITY : Exercise 7d

Remarks:

LESSON 40

SUBTOPIC: Relationship between a radius and diameter.

Measuring using a ruler

Content : (By measuring)

Learners with guide of the teacher will draw a circle of radius 3cm. They will extend the line to the edge of the circle. Measure the line, it will be 6cm. So we conclude that ; diameter is twice the radius.

Or d = 2r   Diameter = 2 x radius OR

Or d = r + r   Diameter = radius + radius

ACTIVITY : Exercise 7g (MK primary mathematics Book 4 New Edition) page 139 – 140.

Remarks:

LESSON 41

SUBTOPIC: Relationship between diameter and radius formula.

Content : Diameter when radius is given leaners will be guided by the teacher to use the formula (D = r + r)

1.   Find the diameter of a circle whose radius is 3cm.

R = 3cm , but D = R + R

=   3cm + 3cm

=   6cm

Or D = 2r

=   2 x 3

          =   6cm

2.   Calculate the diameter of a circle whose radius is 3.5cm.

    R = 3.5cm but D =   R + R

                      = 3.5 + 3.5

                      = 7.0cm

   Or D = 2r

         =   2 x 3.5

         =   7.0cm

LESSON 42

SUBTOPIC : FINDING RADIUS GIVEN THE DIAMETER
CONTENT
In this case we use the formula
Radius =   Diameter
                        2

            Or   d
                      2
Example
Find the radius of a circle whose diameter is 12cm.
        r   =   d   but d = 12cm
                          2

        r   =   12   or   12 ÷ 2
                          2

        r   =   6cm

ACTIVITY
Find the radius of circles with the following diameters
a) 10cm   g)   3.5cm
b) 18 cm   h)   5.8cm
c) 8 cm
d) 6cm
e) 28cm
f) 30cm

REMARKS

LESSON 43

SUBTOPIC : Part of a circle

CONTENT : Drawing parts of a circle.

i)   Arc
        An arc is a part of a curved line that makes a circle.

ii)   Circle
        A circle is a complete curve.
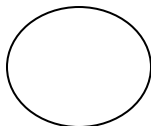
                iii)   Semi circle

A semi-circle is a half a circle.

or
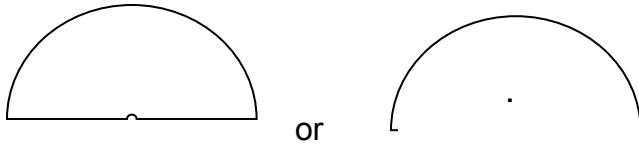
iv) Quadrant
A quadrant is a quarter of a circle.
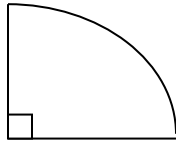
v) Sector
A sector is a part of the area of a circle made by two radii.
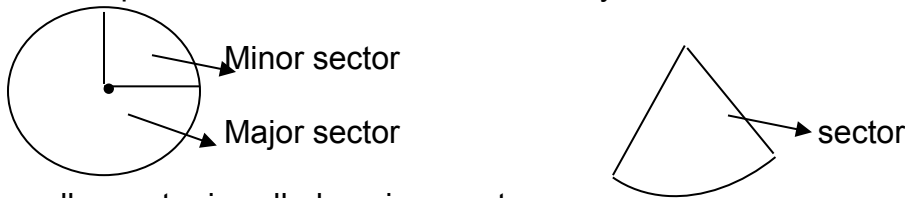
The smaller sector is called a minor sector.

The bigger sector is called a major sector.

vi) Segment
A segment is a part of the area of a circle made by any chord which is not a diameter.
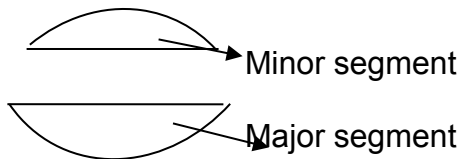
The smaller segment is called a minor segment.
The bigger segment is called a major segment.

REMARKS

LESSON 44

SUBTOPIC : **Curves**

CONTENT : **Definition**

A curve is a bent line. It is drawn without lifting a pencil.

(ii) **Types of curves**

(a) <u>Open curves</u>:

An open curve is a curve drawn from any given point without going back to the starting point.

<u>Examples</u>:

b) Closed curves (**intersecting curves)**

A closed curve is a curve drawn from any given point but going to the starting point using intersecting lines. They do not make clear shapes. They are sometimes called intersecting curves.

<u>Examples</u>:
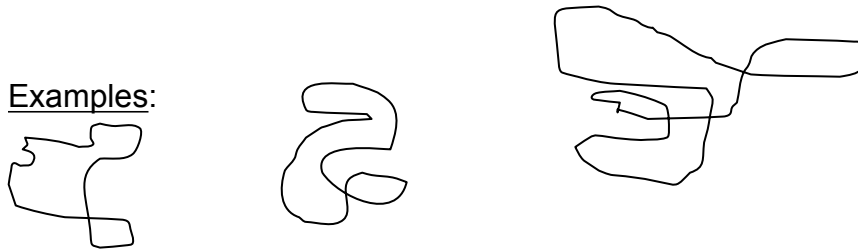
c) Simple closed curves.

A simple closed curve is a curve drawn from any given point but going back to the starting point without using intersecting lines. They always form clear shapes.
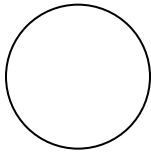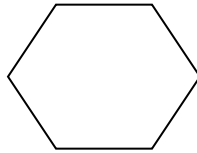
| A circular curve | A hexagonal curve | An oval curve |
| (circle) | (Hexagon) | (oval) |
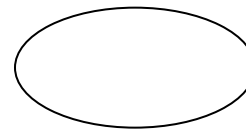
ACTIVITY

Exercise 7 I page 136 MK Primary mathematics bk 4 (old edition)

LESSON 45

SUBTOPIC: Drawing, Naming and measuring lines**.**

CONTENT: (a) (i) Lines.
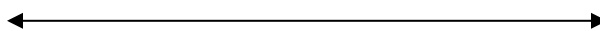
A line has no end points.

(ii) Line segments.

E.P   E.P
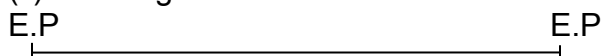
A line has two end points.

(iii) A ray.

E.P
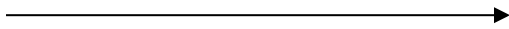
A ray has one end point.

(b) Measuring line segments using a ruler.

(i) ├──────────────┤   (ii)   ├──────────────────────────────┤

(c) Drawing line segments of
        a) 3cm   b) 8.4cm

├───3cm───┤   ├──────────8.4 cm──────────┤

ACTIVITY
1. Draw and name these lines
    a) Line segment
    b) Ray
    c) Line

2. Draw a line segment measuring
        a) 6.3cm   c)   8cm
        b) 4cm   d)   5.1cm

3. Measure the line segment given: ├──────────────┤
REMARKS
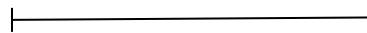
LESSON 46

SUBTOPIC :   POLYGONS

CONTENT:
Definition.

A polygon is a simple closed plane figure.

Naming polygons.
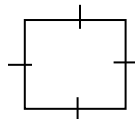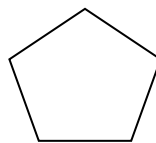
Triangle   square   pentagon   hexagon   octagon
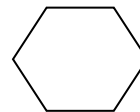
No	Polygon	Number of sides
1	Triangle	Three sides
2	Quadrilaterals	Four sides
3	Pentagon	Five sides

4	Hexagon	Six sides
5	Heptagon	Seven sides
6	Octagon	Eight sides
7	Nonagon	Nine sides
8	Decagon	Ten sides

ACTIVITY : Draw the following polygons:

i) Triangle
ii) Pentagon
iii) Hexagon
iv) Draw and name 4 examples of quadrilaterals.

REMARKS.

LESSON 47

SUBTOPIC : ANGLES

CONTENT : TYPES OF ANGLES

(i) Right /complementary angle – They add up to 90^0.
(ii) Straight/supplementary angles – Add up to 180^0.

Two complementary angles make one supplementary angle.

Learners write right angle or Not right angle or straight angle in the given task.
Learners are guided to measure angles using a protractor by the teacher.

ACTIVITY: Learner do exercise 7j on page 138 (Mk old edition)

LESSON 48
SUBTOPIC : MEASURING ANGLES USING A PROTRACTOR.

CONTENT
Teacher explains to the learners the scales of a protractor.
➢ Inner scale
➢ Outer scale
➢ Learners identify the line measuring or reading 90^0 and 180^0 on a protractors.

Hint
➢ When measuring angles we start from $0^0.$
➢ The outer scale is used when measuring starts from the left hand side.
➢ The inner scale is used when measuring starts from the right hand side.
➢ Learners measure drawn angles on a piece of paper.

ACTIVITY: Exercise 7n page 141 Mk bk4 (old edition)

LESSON 49

SUBTOPIC: Complementary angles / right angles

These are angle which add up to 90^0

Examples:

$y + 50^0 = 90^0$ (Right angle)

$y + 50^0 - 50^0 = 90^0 - 50^0$

$Y + 0 = 40^0$
$Y = 40^0$
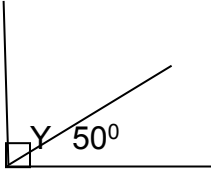
c) Work out the size of angle m.

b) Find the size of angle K

$K + K + 30^0 = 90^0$ (Right angle)
$2K + 30^0 = 90^0$
$2K + 30^0 - 30^0 = 90^0 - 30^0$
$2K + 0 = 60$
$\dfrac{2K}{2} = \dfrac{60}{2}$

K = 30⁰
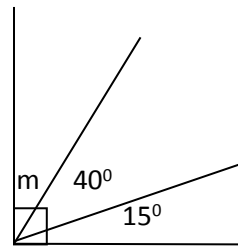
$m + 40 + 15 = 900$ (Right angle)

$m + 550 = 900$

$m + (55 - 55) = 90 - 55$

$m + 0 = 35^0$

m = 35⁰

d) Find the complement of 20^0.

Let the complete of 20^0 be X

$X + 20^0 = 90^0$ (Right angle)

$X + 20^0 - 20^0 = 90^0 - 20^0$

$\therefore X + 0 = 70^0$

X = 70⁰

ACTIVITY: 1. Find the complement of the following angles.

a) 80^0

b) 45^0

c) 40^0

2. Exercise 7 k page 139 Mk bk4 (old edition).

REMARKS:

LESSON 50

SUBTOPIC : Finding missing angles on a straight line [supplement of angles]

CONTENT : Definition of supplementary angles – angles which add up to 180^0.
- Subtract the given angle
    (a) Using diagrams   (b) Without using diagrams.
<u>Examples</u>: (a) Find the size of angle Y.
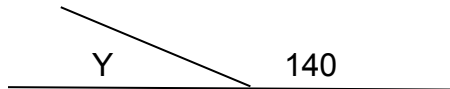
Y   140   <u>side work</u>

$y + 140^0 = 180^0$ (straight angle) 180^0

$y + 140^0 - 140^0 = 180^0 - 140^0$ -140^0

$y + 0 \quad = 140^0 - 40^0$ 40^0

$\therefore y = 40^0$

b) Find the size of angle n

60^0
n   n
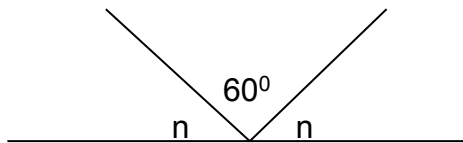
$n + n + 60 = 180^0$ (straight angle)
$2n + 60 = 180^0$
$2n + 60 - 60 = 180 - 60^0$
$2n \quad = 0$
$2n \quad = \underline{120^0}$
$2 \quad\quad 2$
$n \quad = 60^0$

d)   Find the supplement of 60. Let the supplement of 60 be K

60^0 K
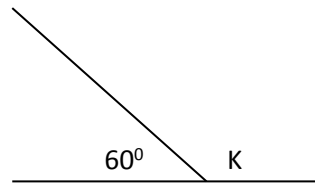
$K + 60^0 = 180^0$ (straight angle)

$K + (60^0 - 60^0) = 180^0 - 60^0$

$K + 0 = 120^0$

$\therefore K = 120^0$

c) find the value of r
<u>Illustration:</u>
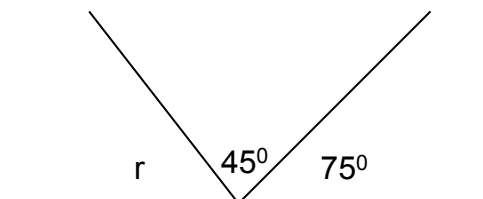
r 45^0 75^0

$r + (45 + 75^0) = 180^0$ (straight angle)

r + 120⁰ = 180⁰

$r + 120^0 = 180^0$
$r + 120^0 - 120^0 = 180^0 - 120^0$
$r + 0 = 60^0$
$r = 60^0$

ACTIVITY : Exercise 7p page 142 (MK old edition)
(ii) Find the supplementary angles of: (a) 130^0 (b) 143^0 (c) 150^0
(d) 180^0

REMARKS.

LESSON 51

Subtopic : Finding missing angles in a triangle.

CONTENT: A triangle must have 3 angles and 3 sides.

Angle sum of interior angle of a triangle is 180^0.
Example:
Find the value of angle X.

e.g. 1   find x
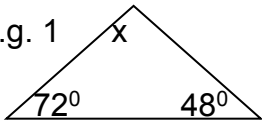
$x + 72^0 + 48^0$ = 180^0(interior angle sum)
$x + 120$ = 180^0
X = $180^0 - 120^0$
$X = 60^0$

Learners will try angles in a right angled triangle and find missing angles
2.

$X + 90^0 + 35^0 = 180^0$
$X + 125^0 = 180^0$
$X + 125^0 - 125^0 = 180^0 - 125^0$
$X + 0 = 55$

∴ **X = 55⁰**
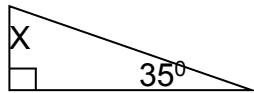
3.   Work out the value of P in degrees.
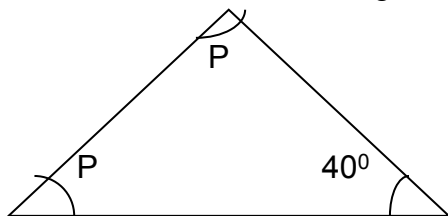
$P + P + 40^0 = 180^0$ (Interior angle sum)

$2P + 40^0 = 180^0$

$2P + 40^0 - 40^0 = 180^0 - 40^0$

$2P + 0 = 120^0$

$\dfrac{2P}{2} = \dfrac{120^0}{2}$

$\therefore \underline{\textbf{P}} = \textbf{60}^0$

ACTIVITY . Exercise 7r MK bk4 (old edition) page 144.

LESSON 52

TOPICAL QUESTIONS ON GEOMETRY.

1. Draw the following shapes
   a) Trapezium   b)   Kite

2. How many

   Faces
   Edge
   Vertices

3. Name the line below.
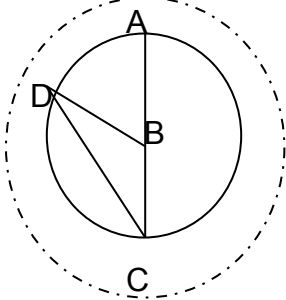
   a) AB _____
   b) AC _____
   c) DC _____

b) Point B   c)   How many radii are shown on the circle>
d) What name is given to the shown dot round the circle?
e) If AB = 30cm . Find the length of AC.
4.   Draw line segment of 5cm
5.   What name is given to a 7 sided figure.
6.   What is complement of 20^0?
7.   What is the supplement of 20^0?
8.   Find the angle M
a)   b) Work out angle y   c) Work out angle P
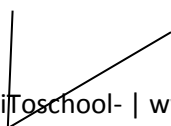
m   P

60^0 135^0 y
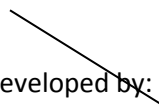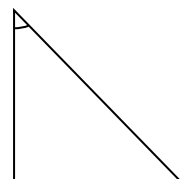
□ 20^0

9(i)   Find x   (ii) Find y   (iii) Find t

x   y   t

x 40^0 y   t 30^0

30^0
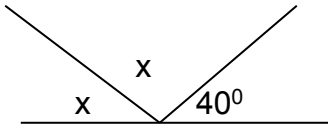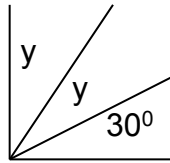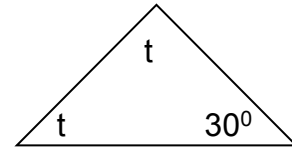
SIR APOLLO KAGGWA SCHOOLS
P.4 TERM III LESSON PLAN

LESSON 1

SUBTOPIC: RECOGNITION OF MONEY.

CONTENTS

COINS	BANK NOTES
50 /=	1000/=
100/=	5000/=
200/=	10,000/=
500/=	20,000=
	50,000/=

ACTIVITY : Exercise 8a page 148 (MK new edition).
REMARKS.

LESSON 2
SUBTOPIC : CHANGING SHILLINGS TO CENTS

CONTENT:
Examples
1. Change sh. 3 to cents
   1 shillings = 100cts
   3 shillings = 100 x 3
   $\qquad$ = 300cts.

2. Change shs. 250 to cents
   1 sh = 100cts
   250 sh = 100 x 250
   $\qquad$ = 25,000 cts

Change cents to shillings
   1) Change 300ts to shillings
   1 Sh = 100cts
   (300) sh = 300cts
   (100)
   $\qquad$ = **3 shillings**.

   ACTIVITY : Exercise 8a page 147 and 8b page 148 (Mk old edition)

   REMARKS.

LESSON 3

SUBTOPIC : ADDITION OF MONEY

CONTENTS
Examples
i)   Add   sh.1 7 0 + sh 250   ii)   sh . ct
                 Sh 1 7 0   13   20
            +Sh 2 5 0   + 15   50
         Sh   420   28   70

ACTIVITY
Exercise 8b MK 4 page 149 (New edition) exercise 8c Mk bk 4 page 148 (new edition)

REMARKS.

LESSON 4

SUBTOPIC: SUBTRACTION OF MONEY.

CONTENT.
Example.
How much change will you get if you have 1000/= and you spend 350/=

Example
Subtract   Sh   Cts
                         4 3 9   3 5
                    - 2 5 0   4 0
                    1 8   8   9 5
                ==============

ACTIVITY:
Exercise 8d, e and f MK primary mathematics (old edition) 149 and 150.

LESSON 5
SUBTOPIC : MULTIPLICATION OF MONEY.
CONTENT : MULTIPLICATION OF MONEY.

Example I   **Example II**
Multiply   :   sh 896   The cost of 1 loaf of bread
                   x 6   is sh. 1800. Find the cost of 3 loaves
           Sh 5376

                                 Sh. 1 8 0 0
                                    x   3
                                 Sh.   5400

ACTIVITY
Exercise 8d Mk bk 4 page 157.
REMARKS.

LESSON 6

SUBTOPIC: Money
CONTENT: Direct proportion
Definition:
Direct proportion means the relationship that shows how given quantities increase or decrease with their values.

Examples
i. 1 book costs sh. 200. What is the cost of 4 similar books?

Books	Shillings
1 book costs	sh. 200
4 books cost	sh. 200
	X 4
	Sh. 800

ii. 2 pens cost   sh. 600. What is the cost of 1 similar pen?

Pens   Shillings
2 pens cost   sh. 600   sh 300
1 pen costs   sh. 600   2|600
                2   3x2 =6
                                 0
            =sh. 300   0x2= -0
                                 0
                      0x2= -0   = sh. 300

Iii 4 mangoes cost sh. 800. What is the cost of 6 similar mangoes?

Mangoes   Shillings
 4 mangoes cost   sh.800   sh. 200
But 1 mango costs sh.800   4 800
                4   2x4 = - 8
                                     0
            = sh. 200   0x4   - 0
                         0x4 =   0   = sh.200
                                  -0

∴ 6 similar mangoes cost sh. 200
                    x   6
                  sh.1200

Activity
1. 1 ruler costs sh. 400. What is the cost of 3 similar rulers?
2. 1 pencil costs sh. What is the cost of 5 similar pencils?
3. 4 sweets cost sh. 200. What is the cost of 1 similar sweet?
4. 6 pockets of biscuits cost sh. 600. what is the cost of 1 similar pocket of biscuits?
5. 3 tins cost sh. 900. what is the cost of 2 similar tins?
6. 5 rubbers cost sh. 1000. what is the cost of 7 similar rubbers?
Remarks:

LESSON 7

SUBTOPIC: BUYING AND SELLING (SHOPPING BILLS) (PRICE LIST)

CONTENT
Example

Item	Price in shillings
1 bar of soap	1000/=
1 kg of sugar	1800/=
1 kg of maize flour	1200/=
1 packet of salt	400/=
An egg	150/=

Questions
a) Find the cost of 3 kg of sugar.
b) If Allen bought 4kg of maize flow and 1 bar or soap. How much money did she pay?
c) Calculate the cost of buying 1 bar of soap. 1kg of sugar, 1kg of flour, 1 packet of salt.
d) Find the total expenditure if one buys all the items above.

ACTIVITY
Exercise 8e page 152 (Mk New Edition)

LESSON 8

SUBTOPIC :   SHOPPING BILLS

CONTENT
Example I
Mariam went to the school canteen and bought the following items
3 chaps at 500/= each.
4 chapats at 800/=
2 bottles of soda at 500/= each.

a) Find her total expenditure .
b) Find her balance if she went with 50000/=

Sh.5,000
-sh.4,300
  Sh. 700
    ======

Item	Method (working)	Cost
3 Chaps	Sh. 500 x 3	Sh.1500
4 Chapats	Sh. 800	Sh.800
2 Soda	Sh. 1000 x2	Sh.2000
Total		Sh.4300

Working
Chaps   soda   chapats:
Sh. 500   sh.1000   sh. 800
Sh. X 3   sh. x 2   sh. 800
1500   sh.2000

ACTIVITY : Exercise 8i page 153 MK (Old edition)
More activity:
1. If Asekenye bought 2 loaves of bread at sh. 800 @ loaf, 4 books at sh. 300 per book and 4 bundles of onions at sh. 500.
a) What was her total expenditure?

b) If she had sh. 5000, calculate her balance.

LESSON 9

SUBTOPIC : DIVISION OF MONEY.

CONTENT
Example
4 books COST 1200/=. What is the cost of one book.

4 books   cost   -   1200   sh 300
1 book   cost $\frac{1200}{4}$ =   4\1200
                                3x4=12
        300   - - 0
                              0x4 = - 0
                              0x4 =   0 = sh. 300
                                 0
                                 -

ACTIVITY
Exercise 8f page 153 (Mk new edition)

LESSON 10

SUBTOPIC : FINDING PROFIT

CONTENT
Profit = selling price – buying price.
Example
Abdul bought a shirt at sh. 800. He sold it at 1000/= what was his profit?

Buying price   sh.800
Selling price   sh.1000
Profit =   s . p   -   B.P
       =   Shs. 1000 – sh. 800

Profit   =   Shs. 200

ACTIVITY: Exercise 8k page 155 (old Mk)

LESSON 11.

SUBTOPIC : LOSS

CONTENT
Loss is the amount of money when the buying price is more than the selling price.
       Loss   =   Buying price – selling price
                          BP   -   SP
The buying price can also be called cost price (CP)

Example

John bought a shirt at 7200/= and sold it at 6000/= calculate his loss.

Loss = BP – SP

BP = 7200/=

SP = 6000/=

∴Loss = sh.7200 – sh. 6000 = sh. 7200

                                        = sh. 6000

                                        = Sh. 1200

ACTIVITY

MK Primary Mathematics Book 4 (Old edition) Exercise 8l page 156.

LESSON 12

SUBTOPIC :   **POSTAGE RATES**

CONTENT

Refer to table on page 162 Mk (old edition)

Example

Joseph sends 2 letters to Kenya and 3 letters to Tanzania. How much will he pay altogether.

				side work	
2 letters to Kenya	sh.400 x 2	=	sh. 800		
3 letters to Tanzania	sh.400 x 3	=	+sh. 1200	sh. 800	sh. 400
Total amount			Sh. 2000	x 2	x 3
				Sh.1600	sh.1200

Therefore, Joseph will pay 2000/=

ACTIVITY

Exercise 8q

Page 163 Mk (old edition)

LESSON : 13

TOPICAL QUESTIONS (MONEY)

1. How much money is in 3 one hundred shilling coins.
2. Change
   a) 5 shillings to cents
   b) 600 cts to shillings.
3. Work out:

a) Shs	cts	Sh	cts
43	40	52	30
+ 14	30	- 1 1	1 4

4. The cost of 1 pen is 400/=. Find the cost of 6 similar pens.
5. Study the price list below and answer the questions that follow.

Item	Price
1 book	1500/=
1 packet of biscuit	2000/=
1 bar of soap	800/=

A sweet	100/=

a) Find the cost of 4 packets of biscuits
b) Find the cost of buying 1 book and a sweet

6. 3 pens cost sh. 900. What is the cost of 1 pen?
7. An article costs sh. 300. Calculate the profit made if is sold at sh. 700
8. Tom bought a shirt at 1000/= and sold at 800/=. What was his loss?

LESSON 14

SUBTOPIC : CHANGING WEEKS TO DAYS
CONTENT
1 week has 7 days
Example
How many days are in 3 wks.
1 wk   -   7 days
3 wks - 3 x 7 = 21 days.

Example
Joseph spent 6 weeks in London. How many days were they
        1 wk   - 7 days
         6wk   - 6 x 7
            = 21 days

ACTIVITY
Exercise 9p 178 (Mk new edition).

LESSON 15

SUBTOPIC : CHANGING DAYS TO WEEKS

CONTENT
Example
How many weeks are there in 63 weeks?

7 days   - 1   week
 63 day - 63 weeks
            7
In 63 days there are 9 weeks.

ACTIVITY
Exercise 9n page 176 (old Mk).

LESSON 16

SUBTOPIC : ADDITION OF WEEKS AND DAYS

CONTENT
Example :

Add :	Weeks	Days	SW
	5	5	5
+	4	6	+ 6
	10	3	11days

$11 \div 7$

$$7 \overline{)11} \begin{array}{l} \text{1 week} \\ \hphantom{11} \\ -7 \\ \text{3 days} \end{array}$$

= 1 week and 3 days

LESSON 17

SUBTOPIC: CHANGING HOURS TO MINUTES

CONTENT
HINT: 1 Hour = 60 minutes , ½ an hr = 30 minutes, ¼ an hr is 15min.
Example
Change 4 hours to minutes
1 hr = 60 minuts
4hrs = (4 x 60) min
        = 240 min.

b)   How many minutes are in 3 ¼ hours?
        3 ¼ hrs = (3 x ¼) hours
        1hr = 60 min
        3 hrs = (3 x 60) = 180 min
        ¼ hr = (¼ x 60) = 15 min
        ¼ hr = (1/4 x 60) = 15 min
        3 ¼ hrs = (180 + 15) min
              = 195 min.

ACTIVITY:
Exercise 9b page 163 (New MK)

LESSON 18

SUBTOPIC :   CHANGING MINUTES TO HOURS

CONTENT,.
Example.
Change 180 minutes to hours.

60 min – 1 hour
180 min – $\frac{180}{60}$

= 3 hrs

Example
Peter spent 240 minutes in an exam. How many hours ere they.

        60 min   -   1 hr

        240 min   - $\frac{240}{60}$

               =   4 hrs.

ACTIVITY:
Exercise 9c Mk primary mathematics bk 4 (New edition) page 163 exercise 9c.

LESSON 19
SUBTOPIC : ADDITION OF TIME.

CONTENT : Addition of hours and minutes

Examples
1. Hrs   Min
     1   30
+ 3   35
    5   05
=================

ii)   Add 3 hrs 35 minutes to 4 hours 42 minutes
    Hrs   Mi
    3   35
+ 4   42
    8   17
=====================

ACTIVITY:
Exercise 9e Mk bk 4 page 165.

LESSON 20
SUBTOPIC : SUBTRACTION OF TIME

CONTENT
a) Subtract
    HRS   Min
    3   20
- 1   30
    1   50
=================

b) A party lasted 6 hours 30 minutes. If 1 hr 45 minutes were used to serve food. How long did the other events take?

	Hrs	Min
	6	30
-	1	45
	4	45

Therefore the other events took 4hrs 45 minutes.

ACTIVITY :
Exercise 9g page 171 Nos. 1 – 5 and exercise 9h page 172 Nos. 1 – 5 (Mk old edition)

LESSON 21

SUBTOPIC :   **DURATION OF TIME**

CONTENT :   **DURATION OF TIME**

Examples
 i) Maishara started walking from her home at 7:15 am and reached school at 8:15 am. How long did it take her?

		Hrs		Min
Masike reached school at		8	:	15 am
Started walking at	-	7	:	15 am
She took		1	:	00hr
		==========		

Therefore she took 1 hour.

 ii) The party started at 1:30 p.m and ended at 9:00 p.m. Find out how long it lasted.

		Hrs	Min
The party ended at		9	00
It started at	-	1	30
It took		7	30

It took 7 ½ hrs

ACTIVITY:
Exercise 9m page 176 Mk bk 4.

LESSON 22

SUBTOPIC :   **MULTIPLICATION OF TIME**

CONTENT
Multiplication of hours and minutes.

Example 1

Hrs	Min	side work	
3	20	2 0	80 ÷ 60
X	4	x 4	= 1 r 20
13	20	80	

============

Example ii

Hrs	min	side work	
2	30	30	90 ÷ 60
X	3	x 3	= 1 r 30
7	30	90	

============

ACTIVITY
Exercise 9i Mk bk 4 page 171.

LESSON 23

SUBTOPIC DIVISION OF TIME

Examples

1. Divide

	Hrs	Min	
	3Hrs	10Min	
3	9	30	3 hrs and 10 mins
3 x3	9	3	
1 x 3		3	
0 x 3		0	
		0	

2. Divide :

		Hrs	Mins
		05	04
8		40	32

0 x 8   -0

40   3

5 x 8   -40   -0

0 x 8   -   32

-32   = 5hrs and 4mins

ACTIVITY : Exercise 9j page 174 (Mk old edition)

LESSON 24
SUBTOPIC :   WRITING TIME USING AM AND PM
CONTENT:
The time between midnight and midday is written using am.
From midday to midnight we use pm

Example
Write in figures
Twenty minutes past tow o'clock in the morning.   6:20 a.m

Twenty minutes to seven o'clock in the evening.   6 :40pm

ACTIVITY
Exercise 9L page 175 (Mk New edition).

LESSON 25

SUBTOPIC :CHANGING DAYS TO HOURS

CONTENT:
Example
How many hours ar ther in 5 days?
1 day – 24 hours
5 days – 2   4
              X 5
              120 in five days ther are 120 hours.

ACTIVITY :
Exericse 9l pag 175 (old Mk).

LESSON 26
SUBTOPIC: CHANGING HOURS TO DAYS
CONTENT:
Examples
1.Change 72 hours to days

1 day = 24 hours
   72 days
   24 days

_____ = 3 days.

2.How many days are in 48 hours?
     1 day = 24 hours
     48 days = 48 hgours
     24 days
   = 2 days

ACTIVITY :
Exercise 9k page 175 (Mk old edition)

LESSON 27
SUBTOPIC: SUBTRACTING WEEKS AND DAY
CONTENT
Examples

1	weeks	days
	3	2
-	1	5
	1	4

===========

7 + 2 = 9 days

3. Atim went to her aunt's place and spent 4 weeks 3 days there. She spent 2 weeks 6 days reading in a nearby school and the rest or the days she helped her aunt how long did she take helping her aunt?

	WKS	DAYS
	4	3
-	2	6
	1	4

================

7 + 3 = 10 days

She took 1 week 4 days helping her aunt.

ACTIVITY: Exercise 9t page 182 (Mk new edition)

LESSON 28
SUBTOPIC: ORDINARY YEAR AND LEAP YEARS
CONTENT:
An ordinary year has 365 days.
A leap year has 366 days.
Identifying ordinary year and leap year.
We divide by 4 if we get a remainder then it is an ordinary year. If you don't get a remainder then it is a leap year.
Example
   a) 1964   b)   1975

          491   493
     4 / 1964   4 / 1975

```
   16                          16
   36                          37
   36                          36
    4                          15
 -  4                        - 12
    0                           3
```

1964 is a leap year   1975 is an ordinary year.

LESSON 29

TOPICAL QUESTIONS (TIME)
1. How many minutes are I hour?
2. Change 4 hours to minutes.
3. Write 180 minutes as hours
4. Work out

a)
```
   Hrs        Mins
    3          40
 +  1          50
```
===============

b)
```
   WKs        Days
    6          3
 +  1          5
```
=============

c)
```
   Hrs        Min
    7          35
 -  2          45
```
=============

c)
```
   Wks    Days
    7      3
 -  4      6
```
==========

5. Use a.m or p.m
   a) 6 hours after midnight __
   b) 4 hours after noon ___
6. Use > , < or =
   a) 2 weeks _____ a fortnight.
   b) 6 days _____ a week.
   c) 1 hour _____ 30 minutes.

LESSON 30

SUBTOPIC : TOPIC LENGTH.

CONTENT
HINT: 1 m   =   100cm
Example
Change 3m to cm
1m   =   100cm
3m   =   3m   x   1000cm
           1m

     =   3m = 3m x 100cm
          1m

     = (3 x 100)cm
     =   300 cm

ACTIVITY : Exercise 10a page 186 (old Mk)

LESSON 31
SUBTOPIC : CHANGING CENTIMETERS TO METRES

CONTENT
Hint: 100cm   =   1m

Example I	**Example II**
Chang 300m to metres	Change 9800cm to m
100cm = 1m	100cm = 1m
300cm = 300	9800 = 9800
3m	98m
====	====

ACTIVITY: Exercise 10 b No. 1 – 2 Mk bk 4 page 186.

LESSON 32

SUBTOPIC : EXPRESSING LENGTH IN METRES AND CENTIMETERS

CONTENT
Example
Change 120 centimeters to meters
120 cm   =   (100 + 20) cm

     =   100cm + 20cm
          100cm   =   1m   20cm   Or 120 cm =   1 m   20cm
ACTIVITY : Exercise 10c page 187 (New Mk).

LESSON 33

SUBTOPIC : ADDITION OF METERS AND CENTIMETERS.

CONTENT.

EXAMPLES

a) M   CM
    3   49
+ 2   77
    6   26
    ===========

b)   M   CM
      2   40
+   3   10
      1   35
      6   85
      =======

c) Atim slashed Hm 4m 75cm of a path. Munagira slashed 3m 65cm long. What total length of the path did they slash altogether?

      M   CM
      4   75
+   3   65
      8   4
================

They slashed 8m 40 cm of the path altogether.

ACTIVITY: Exercise 10c page 187 (MK old edition).

LESSON 34

SUBTOPIC   :   SUBTRACTION OF METRES
CONTENT
Example
Subtraction   5m   20cm - 2m 65 cm.

      M   CM   CM
      5   140   140
-    2   65   -65
      2   75   75
      =================

Example
Joshua had a string measuring 6m   40 cm and he cut off 1M 60CM.What is the length of the string that remained.

      M   CM
      6   140
-   1   60
      4   80
ACTIVITY
Exercise

MK primary mathematics book New edition page 189 exercise 10g.

LESSON : 35

SUBTOPIC: **MULTIPLICATION OF METER AND CENTIMETERS**

CONTENT
Example I
Mary, Joseph and Karen each bought 3m 45cm of cloth what was the total length to the cloth bough. Each bought 3m   45cm
Therefore, 3 pupils bought

```
        M           CM
        3           45
        X            3
        10          35
        ============
```

Or	M	CM
Mary bough	3	45
Joseph bought	3	45
Kareen bought	3	45
Altogether they	10	35
Bough	============	

Altogether they bought 10m . 35 cm.

Example I
A family 7 people got 8m 25cm of the cloth each. What was the total length of cloth got by the whole family.

```
Each got                          8m      25cm
Therefore 7 people  got           M       CM
                                  8       25
                                  X        3
                                  10      35
                            ============
```
Altogether they bought 10 m   35cm

Example I
A family of 7 people got 8m 25cm of the cloth each. What was the total length of cloth got by the whole family.

```
Each got              8m     25cm
Therefore 7 people got   M     CM
                      8      25
                      X       7
                      57     75
                      =======
```
Altogether they got 57m 75cm.
ACTIVITY: Exercise 10h Mk bk4 page 190.

LESSON 36

SUBTOPIC: DIVISION OF METERS AND CENTIMETERS

CONTENT :   (Remember to divide meters first)
Example
The piece of timber 2 boys are to share equally is 8m 10cm long. What length while each get?
  8M 10cm shared by 2 boys

8m   10cm ÷ 2   8m   ÷ 2 = 4m
                                                          10cm ÷ 2 = 5cm

      M   Cm   4m 5cm
      4   05
2 / 8   10
      8   10

Each got 4m 5cm long

ACTIVITY: Exercise 10i page 191 (New MK)

LESSON 37
SUBTOPIC: CHANGING KILOMETRES TO METRES

CONTENT
Example
    1. Change 5km to m
         1km = 1000m
         5km = 1000 x 5
              = 5,000m

    2. Convert 3km 60m to metres.
         Change the km to m then add the metres.
         1km = 1000m   3000 m
         3km = 1000 x 3   +   650 m
              = 3,000m   3650 m
                                        ===========

         ACTIVITY : Exercise 10h page 191 and exercise 10i page 192 (Mk old edition)

LESSON 38

SUBTOPIC : MEASURING LONG DISTANCES

CONTENT :   CHANGING METERS TO KILOMETERS

Example I
N.B: 1000m = 1km

Change 3000m to km

Then 3000 m   = 3000
                        1000

=   3km

Example II
Change 20,000m to km since 1000m = 1km
Then 20,000m =   20,000
                            1000

=   20km.

ACTIVITY
Exercise 10j Mk bk 4 page 193.

LESSON : 39

SUBTOPIC : ADDITION OF KILOMETERS AND METERS.

CONTENT: **Remember 1km = 1000m**

Example :   Add   KM   M
                                    15   880
                            +   6   750
                                    22   630
                             ==================
ACTIVITY: Exercise 10p page 197 (New MK).

LESSON 40

SUBTOPIC :   SUBTRACTION OF KM AND METRES
CONTENT
Example
Subtract 2km 400cm from 7km 100cm

    KM   M
    7   100
-   2   400
    4   700   4km   700m

ACTIVITY
MK Primary Mathematics bk 4 (page 198 exercise 10q (Mk new edition).

LESSON 41
SUBTOPIC :   MULTIPLICATION OF KM AND METRES

CONTENT:
Example

1. KM   M

```
   8              350
   X                3
   25             050
   =============

2. KM           M
   35           320
   X              3

   105          960
   =============
```

ACTIVITY : Exercise 10r page 200 (MK new edition)

LESSON 42

SUBTOPIC : Finding perimeter

CONTENT: Definition.
  (i)   Perimeter is the total distance around a figure.
  (ii) Finding perimeter by measuring lengths of sides of a figure.
        We use a centimeter ruler to measure the lengths of a given figure.

Example:

Use a centimeter ruler to measure the lengths of the sides of the figure below.

Before measuring: After measuring:
PQ = _____cm   PQ = 7cm
QR = _____cm   QR = 2cm
RS = _____cm   RS = 7cm
SP = _____cm   SP = 2cm

Add PQ to QR to RS to SP to get the total distance around rectangle PQRS.

$\therefore$ PQ + QR + RS + SP

  = (7cm + 2cm) + (7cm + 2cm)

  = 9cm + 9cm

  =   18cm

The total distance around the figure is 18cm

$\therefore$ the perimeter is 18cm.

Activity: Exercise 11a

REMARKS:

LESSON 43

SUBTOPIC : Finding Perimeter.

CONTENT : Finding perimeter of a rectangle:

Example:

L = 5cm
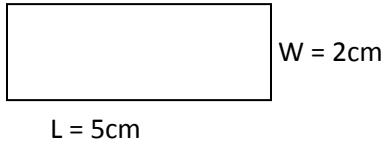
Find the perimeter of the figure above.

P = L + W + L + W

  = (5cm + 2cm) + (5cm + 2cm)

  =   7cm   +   7cm

  =   14cm

ACTIVITY:

Exercise 11b page 200 (MK Old edition)

REMARKS

LESSON 44

SUBTOPIC : Finding length or width of a rectangle.

CONTENT : Finding length or width of a rectangle when perimeter is given.

Example:
Find the width of a rectangle if its length is 6m and perimeter is 20m.

<u>Sketch</u>

L = 6m
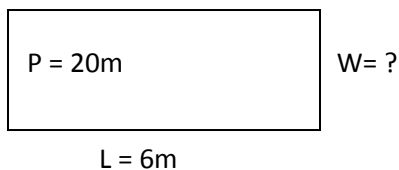
    P = L + w + L + W

    20m = 6m + w + 6m + w

    20m = 6m + 6m + w + w

    20m =   12m   + 2w

    20 - 12m = 12m - 12m + 2w

$$18m \quad = \quad 0 \quad + 2w$$

$$18m \quad = \quad 2w$$

$$\frac{18m}{2} \quad = \quad \frac{2w}{2}$$

$$9m \quad = \quad w$$

$$w \quad = \quad 9m$$

$$\therefore \ width \ = \quad 9m$$

ACTIVITY

1. Find the length of a rectangle below whose perimeter is 18m and width is 4m.

    ```
    ┌──────────────────┐
    │                  │  4m
    └──────────────────┘
          L = ?
    ```
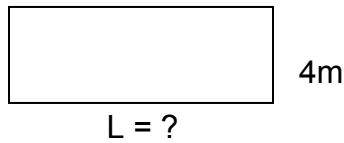
2. Work out the width of the figure below is its perimeter is 20cm.

    ```
    ┌──────────────────┐
    │                  │  w=?
    └──────────────────┘
          8cm
    ```
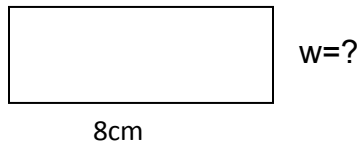
3. What is the length of the figure below if its width is 3m and perimeter is 24m?

    ```
    ┌──────────────────┐
    │                  │  3m
    └──────────────────┘
          L =
    ```
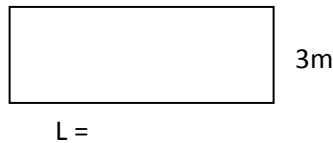
4. Work out the width of a rectangle whose length is 7cm and perimeter is 22cm.

    REMARKS:

LESSON 45

SUBTOPIC :   **DIVISION OF LONG DISTANCE**

CONTENT: DIVISION OF LONG DISTANCE

Divide 25km 40m   by 8

```
        3km     130m
      ┌─────────────────
    8 │ 25km    40m
      └                          130m
  3x8 =24              ̸      8 1040m
                      ̸
```

```
    1km              x8   -8
                          24
        1km = 1000m   3x8 -24
                            0
    Then 1000m        0x8  - 0
      + 40m                 -
        10 40m
```

ACTIVITY: Exercise 10r Mk bk 4 page 200.

LESSON 46:

SUBTOPIC :   PERIMETER OF DIFFERENT FIGURES

CONTENT:
Hint : Perimeter is the distance around a figure

Example
Find the distance around the following figures

a)

L + W + L + W
4 + 3 + 4 + 3
7 + 7
= 14cm

P = Add the side around the figure
(12 + 3 + 7 + 3+ 5+ 6)
= 15 + 10 + 11
= 36cm

P = 5 + 5 + 5
 = 5 + 4 + 4
= 13 cm

ACTIVITY : Exercise 116 page 201 (old edition)

LESSON 47

SUBTOPIC: PERIMETER OF REGULAR POLYGONS.

CONTENT- Definition:
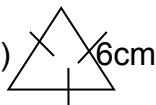
Polygon:- A polygon is a closed figure joined by its line segments at its vertices.
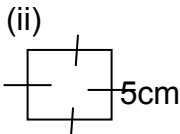
Regular polygon:- A regular polygon is a polygon with all its sides and angles equal.
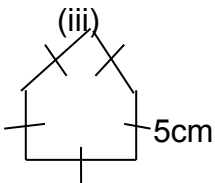
Examples of regular polygons include equilateral, square, regular pentagon e.t.c

Example

Find the perimeter of the figures below.

(i) 6cm

P	=	S + S + S
P	=	6 + 6 + 6
P	=	18cm

(ii) 5cm

P	=	S + S + S + S
P	=	5 + 5 + 5 + 5
	=	20cm

(iii) 5cm

P	=	S + S + S + S + S
P	=	4 + 4 + 4 + 4 + 4
P	=	20cm

ACTIVITY
1. Find the perimeter of each of the following:

(i)   **LESSON 48**   7m

(ii)   3cm

(iii)   2cm   **SUBTOPIC**   :
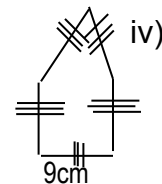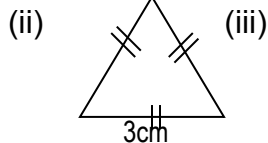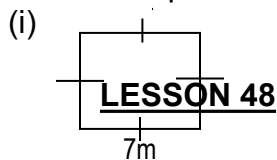
iv)   9cm   **FINDING**

THE   **SIDE OF SQUARE WHEN**   **PERIMETER IS**
GIVEN.

CONTENT
A square is an example of regular polygon.
It has all its sides and angles equal.

Examples : if the perimeter of the square is 48cm Find the length of each side.

Sketch

| P = | S + S + S + S |
| P = | 4s |

P = 48cm
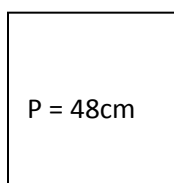
48cm = 4s

$\underline{48}$cm = $\underline{4s}$
4   4

∴ The length of each side is 12cm.

ACTIVITY: Exercise 11d page 205 (old edition MK)

LESSON 49

TOPIC :   AREA OF RECTANGLES
CONTENT
Area is the amount of space covered by a flat surface. Are can be measured using small square units.

Example I
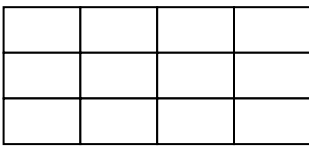
A = 12 square units

4dm

6dm

A   =   L x w
A   =   6dm x 4dm
A   =   24dm^2

Example II

5cm

3cm

A   =   L X W
A   =   5cm x 3cm
A   =   15cm2
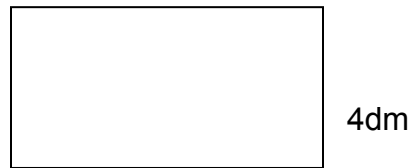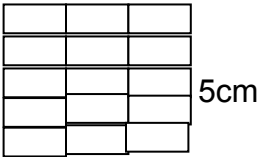
ACTIVITY
Exercise 12a page 210 Mk bk 4.

LESSON 50

SUBTOPIC : AREA OF THE SQUARE
CONTENT
Exa

5cm

A = S X S
  = 5cm x 5cm
A = 25cm^2

7m

7m   7m

A = S x S
  = 7m x 7m
A = 49m^2
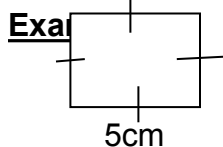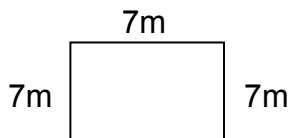
7m

A square garden measures 9cm.
Find its area.

Sketch

9cm	A	=	S X S
		=	9cm x 9cm
	A	=	81cm^2

ACTIVITY: Exercise 11c page 208 (Mk new edition)

LESSON 51

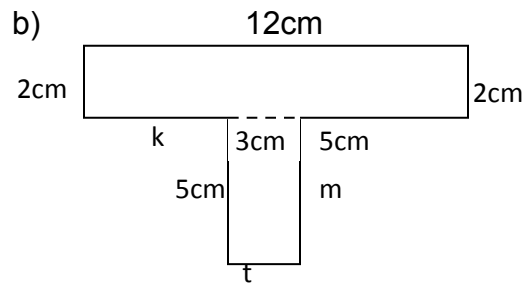## **SUBTOPIC: FINDING MISSING LENGTHS OF POLYGONS (FIGURES)**.
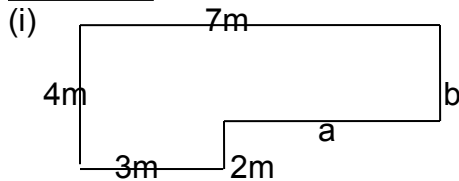
CONTENT:
Examples
(a) Find (i) P
(ii) y

5cm

6cm   y

P

4cm

8cm
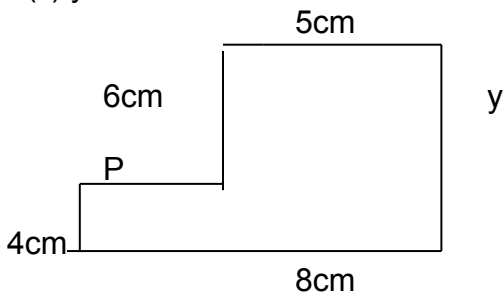
Find P 8cm – 5cm
= 3cm

y = 4cm + 6cm = 10cm

b)   12cm

2cm   2cm

k   3cm   5cm

5cm   m

t

Find (i) t
(ii) m
(iii) k

ACTIVITY

(i)   7m

4m   b

a

3m   2m

Find (i) a
(ii) b

(ii)   6cm

3cm

c   d

2cm

9m
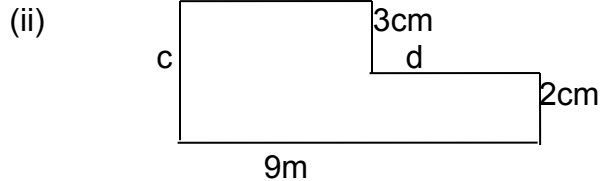
Find (i) c
(ii) d

LESSON 52

SUBTOPIC : AREA BY SEPARATING FIGURES

2cm

A   5cm

8cm   4cm

B   Y
         3cm

X = 6cm
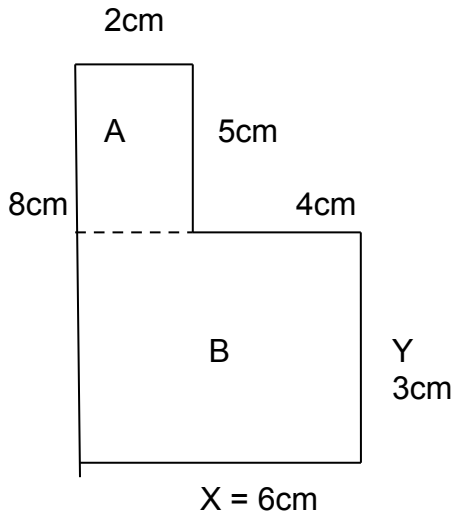
a) Find x 2 + 4 =   6cm

b) Find the area
    2cm   A   = l x W

    A | 5cm   5 x 2
                        10cm^2
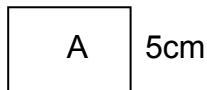
    B ^{A}= L x w
                       6 x 3
                        18cm^2

    Total
    1 0 cm^2
    + 1 8cm^2
    28cm^2
    =====

ACTIVITY
(Mk old edition) bk 4 exercise 12b page 212 and 213.

LESSON 53

SUBTOPIC : FINDING THE LENGTH OR WIDTH OF A RECTANGLE WHEN AREA IS GIVEN.

CONTENT
Example.
The area of a rectangle is 24cm². Its length is 6cm. find its width.

A = L x W
24cm² = 6cm x w
24cm x cm = 6cm x w

$$\frac{\overset{4}{\cancel{24cm}} \ x \ cm}{\underset{1}{\cancel{6cm}}} = \frac{\overset{1}{\cancel{6cm}} \ x \ w}{\underset{1}{\cancel{6cm}}}$$
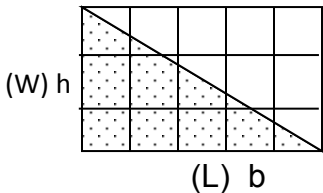
4 x cm = w
4cm = w
w = 4cm
∴ its width is 4cm

ACTIVITY : Exercise 11g Mk bk 4 page 209. (old edition).

SUBTOPIC: FINDING AREA OF A TRIANGLE:

CONTENT Finding area of a triangle using small squares.

Example:

(W) h

(L) b
L = 6cm   b = 6cm
W = 3cm   h =3cm
Area of the shaded part is half the area of a rectangle (¹/₂ of 18cm²) that makes the area of a triangle (9cm²)
Then the area of a triangle equals the half of the area of a rectangle.
Then area of a triangle = ½ x L x W
= ½ x b x h
= ½ x base x height
= ½ x 6cm x 3cm
=   9cm².
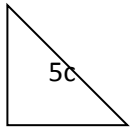Activity Exercise 11h page 212 (MK old edition)
REMARKS.

LESSON 54

SUBTOPIC : AREA OF TRIANGLES

CONTENT
Example
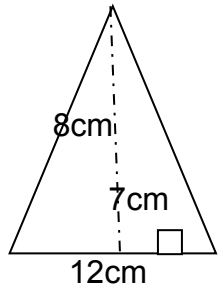Calculate the area of the triangle below.

5cm
5c
6cm

base = 6cm
Height = 5cm
A = ½ x base x height
A = ½ x b x h
A = ½ x 6cm x 5cm
A = 3cm x 5cm
A = 15cm^2

b)

8cm   13cm
7cm
12cm

A = ½ x b x h
= ½ x 12 x 7
= 6 x 7
= 42cm^2

ACTIVITY: Exercise 11i page 213 (Old edition)

LESSON 55 TOPICAL QUESTIONS (LENGTH)

Complete the table

Metre	1	2		3	7
Cm	100	____	400	_____	___

b)

K m	1	4		5	9
M	1000		7000		

2. Work out

a)
```
     M      CM          M       Cm         KM        M
     4      20          4       77         10       244
  +  2      99       -  1       92      +   3        11
 =================   ================   ===============
```
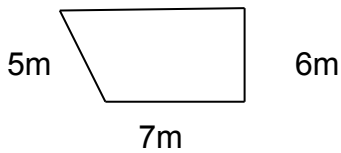
d)
```
 Km       M
  9      294
- 8      720

 ============
```
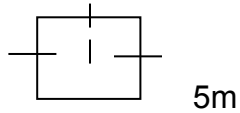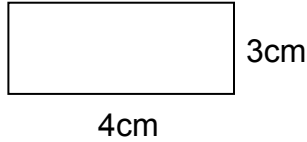
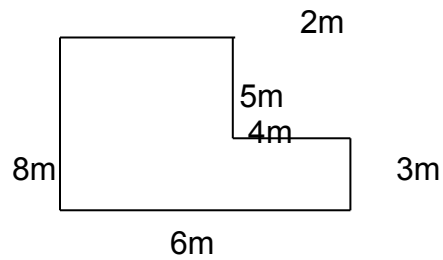Find the distance around this figure.

9m

5m   6m

7m

4.   A rope is 53m and 41 cm long. If a I cut off 29m 65cm. what length do I remain with?

5.   Find the perimeter of these figures

3cm

4cm

b)   6cm 6cm 5cm

9cm

5m

2m
5m
4m
8m   3m

6m
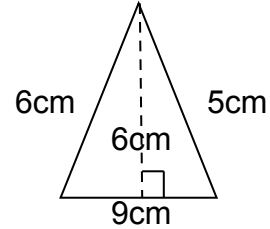
7. Find the area of these figures .
   a)   b)   c)

4cm

2m
9m

4m

3m
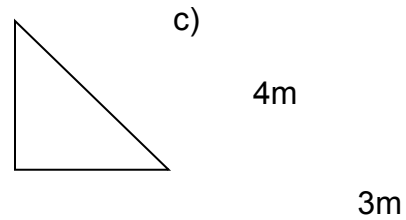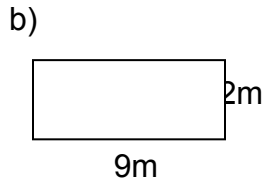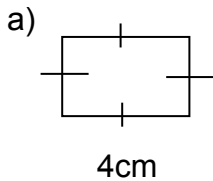
LESSON : 56

TOPIC   :   CAPACITY

SUBTOPIC :   HALF AND QUARTER LITRES.

CONTENT   :

NOTE:

1 litre = 2 half litres	1 litre	=	4 quarter litres
2 litres = (2 + 2) half litres	2 litres	=	(4 + 4) quarter litres
3 litres = (2 + 2 + 2) half litres	3 litres	=	(4 + 4 + 4) quarter litres.

Example
How many ½ litre bottle are in 1 litre container? 1 litre = 2 half lire bottles.

Example II

How many ¼ litres are in 2 litres?
2 litres = (4 + 4) quarter litres.
2 litres = B quarter litres.

ACTIVITY
Exercise 13a MK bk 4 page 223

LESSON : 57

TOPIC : CAPACITY.

SUBTOPIC : Half and quarter litres.

CONTENT:
NOTE:

1 litre =	2 half litres	1 litre =	4 quarter litres.
2 litres =	(2 + 2) half litres	2 litres = (4 + 4) quarter litres.	
3 litres =	(2 + 2 + 2) half litres	3 litres = (4 + 4 + 4) quarter litres.	

Example I
How many ½ litre. Bottles are in 1 litre container?
1 litre = 2 half litre bottles.

Example II
How many ¼ litres are in 2 litres?
2 litres = (4 + 4) quarter litres
2 litres = B quarter litres.

ACTIVITY
Exercise 13a bk 4 page 223

Remarks.

LESSON 58

SUBTOPIC : ADDITION OF LITRES AS HALF LITRES.
CONTENT:
Examples
1. Add 1 ½ and 2 ½ litres

1 ½ + 2 ½

1 + 2 = 3

½ + ½ = 1 + 1 = 2 = 1
          2   2

3 + 1 = 4 litres

2.   Mugumu had 2 ½ litres of milk and 4 litres of milk. How much milk does e have altogether?

          2 ½ + 4

=   2 + 4 + ½

=   6 + ½

=   **6 ½ litres.**

Activity : 12c page 224 (Mk old edition)

REMARKS.

LESSON : 59

SUBTOPIC: ADDITION OF LITRES AND MILLITRES

CONTENT:

Example

Add	l	ml
	24	675
+	18	725
	43	400

==================

2.   A home uses 95 litres of water in the morning and 87 litres in the afternoon. How much water is used a day?

Morning	9	5 litres
Afternoon +	8	7litres
1	8	2 litres

===============

Activity : exercise 13 c (s 13c page 225 – 227) New Mk.

LESSON 60

TOPIC :   WEIGHT

SUBTOPIC :   Half and quarter kilograms.

CONTENT:

Hints :
1.   1kg   =   1000g
2.   ½ kg   =   500g
3.   ¼ kg   =   250gm
4.   1/5kg =   200gm

5.   ½ kg + ½ kg = 1kg
      therefore 500g + 500gm = 1000gm
      2 half kg   =   1kg
6.   ¼ g + ¼ kg + ¼ kg + ¼ kg = 1kg
      250g + 250g + 250g + 250 g = 1000g
      4 quarters kg =1kg.

Example
Say true or false
a) 1 kg is less than 700gm

(c) 400gm is less than ¼ kg

b) 3/4kg is less than ½ kg

ACTIVITY
Exercise 14a and 14b MK Bk 4 pages 228 and 229.

Remarks.

LESSON 61

SUBTOPIC :   CHANGING KG TO GRAMMES

CONTENT:
Hint: 1kg = 1000g
Example
Change 2kg to grams
 1kg = 1000g
 2kg = (2kg x 1000)g
       1kg
     = 2000g

ACTIVITY:
Exercise 14c page 230 (New MK)

Remarks.

LESSON 62

SUBTOPIC : CHANGING GRAMS TO KILOGRAMS

CONTENT : REMEMBER 1000g = 1kg.

Example

Change 2000g to kg
 = 1000g = 1kg
        2000g = 20000 x 1kg
                10000g

            =   2kg

Activity : exercise 14d page 230 (New MK)

Remarks.

LESSON 63

SUBTOPIC :   ADDITION OF KG AND GRAMS

CONTENT   :
Example   Add   Kg   g
                  2   250
              +   3   150
                  5   400
              ============

Remarks.

LESSON 64

SUBTOPIC :   SUBTRACTION OF KG AND GRAMS

CONTENT:
Example

1.   Subtract   :   Kg   g
                          75   64
              -28   45
                          47   19

2.   Kg   g
                          59   423
              -           39   651
                          19   772

3.   What weight remains when 17kg 68g is removed from 37kg 84g?

```
    Kg          g
    37          8 4
-   17          68
    20          16
================
```
Therefore : 20kg   16g remains.

ACTIVITY: 12 "S" Page 236 and 12t page 237 Nos 1 – 10 (MK old edition).

Remarks.

LESSON 65

SUBTOPIC   :   MULTIPLICATION OF KILOGRAMS AND GRAMS
CONTENT

Example I   Example II

```
Work out    kg          g              Kg      gm
            32          120            4       310
            X           9              x       3
            289         80             12      930
            ===============            ========
```

ACTIVITY
Exercise 14j Mk bk 4 page 235.

Remarks.

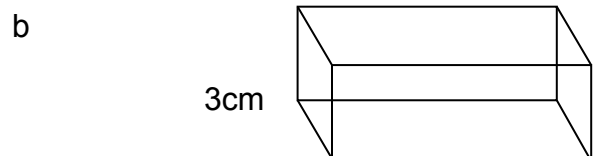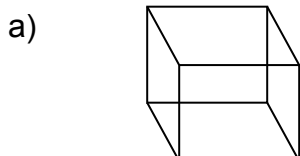# **LESSON 66**

SUBTOPIC: **VOLUME OF CUBES AND CUBOIDS**
C**ONTENT**
Examples
Find the volume of the figures below.

a)   b

3cm

2cm

3cm   4cm

V=   S x S x S   V= L X W X h
=   3 x 3 x 3   = 4 x 2 x 3
=   27cm³   = 8 x 3
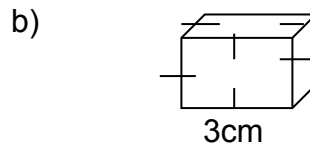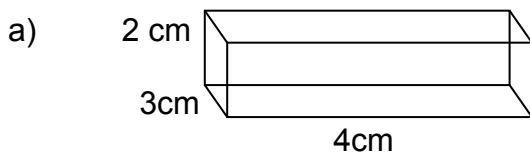   = 24cm³

ACTIVITY: Exercise 129 page 220 (old MK)

Remarks.

TROPICAL QUESTIONS (CAPACITY) (S) WEIGHT)

LESSON 67

1.   How many quarter litres are there in 2 litres?
2.   Work out :
a)   4 ½ litres   + 3 ½ litres.

b)   kidde had 18 litres of water. 11 litres were used. How many litres remained?

a)   2 cm   b)

        3cm

             4cm   3cm

4.   Change 8kg to grams
5.   Work out
a)   kg   g   b)   kg   g   c)   kg   g
        13   150   4   450   5   102
        X   5   + 3   749   -   3   924

        ============   ===============   ==============
6.   Charles gave ¼ kg of meat to Sarah. How many grams did he give to Sarah?

PRIMARY THREE

EVALUATION ACTIVITY

1.   Mr. Obbo was born in 1970. How old was Mr. Obbo in 1989?
2.   Alice was born in 1988. How old was Alice in 1996?
2.   Sir Apollo Kaggwa was started in 2000. How old is it now?

LESSON 68

Type of money
Notes and coins
le

Notes	Coins
1000 notes	50/= coin
50,000 note	100/= coin
5,000 note	
10,000 note	200/= coin
20,000 note	500/= coin

EVALUATION ACTIVITY

1. Name the two types of money we have in Uganda.
2. Identify any 3 notes we have in our country.
3. Name the features found on these coins
   100/= coin
   200/= coin
    50/= coin

LESSON 69

Addition of money

Example :   sh
             100
            +50
             150
            ===

Evaluation
(phase 1 activity)
1. David had sh 6750. He got 2870 from the younger sister. How much money did he have altogether?

2.   Add : Sh   3   0   0
              Shs +3   5   0

              ================

3.   Sh   4.   Sh
      450   1050
    + 300   +   650

      =======   =========

LESSON 70

SUBTRACTION OF MONEY

Eg   sh   750

```
-      Sh           100
       Sh           650
   ==================
```

EVALUATION ACTIVITY

1.   Lule had sh. 1000. He gave sh. 700 to Annet. How much did he remain with?

Expected answer

```
     1000
    - 700
      300
```

2.   sh.   4   5   0   3.   Sh
        Shs   3   0   0   3   0   0
                                             -1   5   0

                                             ===========