## YUDESI NURSERY AND PRIMARY SCHOOL

## P. 7 MATHEMATICS HOLIDAY PACKAGE TERM 1, 2020 Name: <br> $\qquad$ Stream: <br> $\qquad$

## SET CONCEPTS;

1. Given that set $A=\{$ composite numbers less than 20$\}$.

List down members of set $A$.
2. Given that $\operatorname{set} Q=\{a, e, i, o, u\}$. Describe $\operatorname{set} Q$.
3. If set $Y=\{e, f, g\}$. List down all the subsets from set $Y$.
4. Given that $M=\{1,2,3,4, e, f\}$. How many subsets has set $M$.
5. How many elements has a set with 128 subsets?
6. Given that set $R=\{n, m, o, p\}$. How many proper subsets has set $R$ ?
7. Draw a venn diagram to show that all goats are Animals.
8. Given set $Q$ has 255 proper subsets. How many elements has set $Q$ ?
9. Study the venn diagram below carefully and use it to answer the following questions.

a) List down members of set;
i) $P$
ii) $Q$
b) What is
i) $n(P \cup Q)$
ii) $n(P-Q)$
10. From the venn diagram given below shade;
i) $A \cap B$

iii)
$(\mathrm{KUL})^{\prime}$

ii) Conly


11. A die is tossed once, what is the probability of getting:
a) even number on top?
b) a number greater than 4?
12. In a family of 15 members who prefer cassava $(C)$ and Potatoes $(P)$ as shown below. Study it carefully and use it to answer the following questions.

a) Find the value of $t$.
b) How many members eat only one type of food?
c) If a member is picked at random, what is the probability of picking a member who likes eating only potatoes?
13. In a class of 40 farmers, 10 farmers grow Cassava (C) but not millet (M), 20 farmers grow Millet but not Cassava, r farmers grow both while 3 farmers grow neither of the crops.
a) Represent the above information on the venn diagram below.
$n(\varepsilon)$

b) Find the value of $r$.
c) How many farmers grow only one type of crop?
14. The venn diagram below shows the prime factors of $X$ and $Y$.

a) Find the value of:
i) $X$
ii) $y$
b) Calculate the:
i) G.C.F
ii) L.C.M of $X$ and $Y$.
15. Study the venn diagram below and use it to answer the following questions.

a) Find the value of;
i) k
ii) $h$
iii) $p$

## INTEGERS:

16. Find the additive inverse of $-3 t$.
17. What integer is represented by the arrow on the number line below.

18. Compare the following integers using $>,<$ or $=$.
a) 6 -12
b) 5 -5
c) $\quad 7$ $\qquad$ -1
d) ${ }^{+} 6$ $\qquad$ 6
19. Arrange the following integers $-3,4,5,-1,0$ and -5 in ascending order.
20. Simplify:
a) $-6+12$
b) -3--7
21. Workout $-4+6$ using a number line.
22. Simplify ${ }^{-3}$ - - 4 using a number line.
23. Study the number line below and use it to answer the following questions.

a) Write down the integers represented by arrows marked;
i) $a=$
ii) $b=$
iii) $c=$
b) Write down the mathematical statement represented by the number line above.
24. Show the multiplication of $3 \times 2$ on the number line below.

25. The temperature of a patient is $37^{\circ} \mathrm{C}$, it raised by $5^{\circ} \mathrm{C}$. What is the temperature of the patient?
26. Sandra moved 4 steps forward, 6 steps backward and 8 step forward.

Find her position on the number line below.


## MEASURES;

27. Change $2 \frac{1}{5}$ hours to minutes.
28. Express 4 hours into seconds.
29. Express 2.5 tonnes to kg .
30. Convert 2500 gms to kg
31. A birthday party ended at 8.51 p.m. Express this time in a 24 hour clock system.
32. An examination of $2 \frac{1}{4}$ hours ended at 11:40a.m. At what time did it start?
33. A fuel pump attendant pumped fuel from AA342 to AA442.
a) How many litres of fuel did a pump attendant sale?
b) If each litre of fuel was sold at sh.2800. How much money did he get?
34. The area of a circle is 154 cm 2 . Calculate its circumference $\left(\pi=\frac{22}{7}\right)$
35. A bus left Mbarara at $10: 30 \mathrm{a} . \mathrm{m}$, moving at a steady speed of $60 \mathrm{k} / \mathrm{hr}$. If it reached Kasese at 1:30p.m.
a) How long did the bus take to travel from Mbarara to Kasese?
b) How far is Kasese from Mbarara?
36. Express $90 \mathrm{~km} / \mathrm{hr}$ to $\mathrm{m} / \mathrm{s}$.
37. Study the figure below and use it to answer the following questions:

a) Calculate the area of the shaded part.
b) Find the area of triangle $A B C$.
38. When marking a test, a teacher warded 3 marks for every correct answer and deducted a mark for every wrong answer. The test had 20 questions.
a) What is the score for a candidate who gets 15 correct answers?
b) How many questions did a candidate who got 52 marks get correct?
39. Solve the inequality and write down the solution set for the following;
a) $4-3 y=16$
b) $4 \mathrm{p}+2<14$
c) $6+4 \mathrm{p}<8+\mathrm{p}$
40. Today is Wednesday, what day of the week will it be 48days from now?
41. Solve $k-4=3(\bmod 5)$
