Currency exchange

Banks and forex bureau buy and sell currencies of different cuntries at rate different rates according to their values.

To make profit, they buy currencies at a lower value and then sell them at higher values. The difference in the selling and buying value is the banks' profit.

Currency exchange billing board

currency	Selling in Ug. Sh.	Buying in ug.sh.
1 US dollar ($)	3,600	3,650
1Euro (€)	4,000	4,020
1 Rwandese franc	4.0	5.0

Note that:

(1) converting foreign currency into local currency the customer is selling.
Thereore, local currency obtained = foreign currency x selling rate

For example

For example 10 randese francs will fetch 10 x 4 = 40 Ug. Shs.

(2) Converting local currency into foreign currency the customer is buying foreign currency
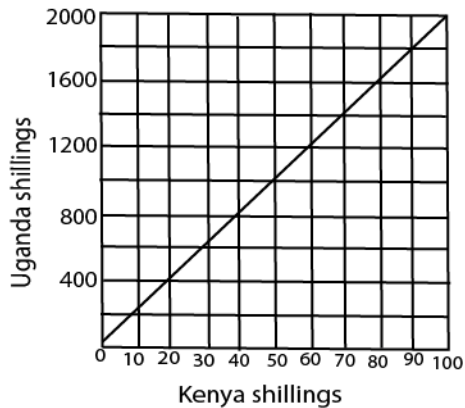The foereign currency $= \frac{local\ currency}{buying\ rate}$

For example
36500 uganda shilling will buy $\frac{36500}{3650} = 10$ USdolar

Example 1

The graph below was used for converting Kenya shillings into Uganda shillings. Use it to answer questions below

(a) If you had 1 Kenya shilling, how many Uganda shillings would you have got?

From the graph
K. shs 80 = Ug shs.1600
K shs $1 = Ug \ shs. \frac{1600 \ x \ 1}{80} = 20$

(b) How many Kenya shillings would one have got for Uganda shillings 1 400?

Ug shs 1400= $\frac{1400}{20}$ = K shs 70

Example 2

A blanket in Uganda costs 20,265 shillings. How much would the same blanket cost in Kenya shillings, given that 1US dollar is Uganda shillings 965 and 1 US dollar is Kenya shillings 65?

Solution

Converting Uganda shillings to dollars

Ug. Shs 965 = 1 USD

Ug. Shs 20,265 = USD $\frac{20265}{965} = 21$

Changing dollars to Kenya shillings

1 USD = K shs. 65

∴ 21 USD = K shs. 65 x 21 = Ksh. 1, 365

Exercise

1. Muke was given a bundle of 50-shillings notes. If a bundle contains 100 notes, how much money was Muke given?

2. If the cost of buying 300 Kenya Shillings is 6,000 Uganda Shillings, how many Kenya Shillings can 42,000 Uganda Shillings buy?

Given that the exchange rate of United States dollars to Uganda shillings is US $ 1 to Ug. Sh. 1,800 and that the exchange rate of the Kenya shillings to Uganda shillings is K. sh. 1 to Ug. Sh.23. How much money in Uganda shillings do I have in total if I have US $ 85 and K.sh. 12,500?

3. Peter was given a bundle of one thousand shilling notes numbered from OR447500 to OR447699 consecutively. How much money did Peter get?

4. A farmer banked Shs. 3 million in Nile bank. If he banked 20,000-shilling notes, how many notes did he bank?

5. A trader has various amounts of money in the following currencies.

          200 United States dollars (US$)
           100 Kenya shillings (K.shs.)
          500,000 Uganda shillings (Ug.Shs)
          Given that the existing exchange rate are
          US$ 1= Ug Shs.1850
          K. Shs 1 = Ug Shs. 25

(a) Find the total amount of amount of money in Uganda shillings, trader has.

(b) If a watch cost K shs. 1,480. Find how many US. Dollars the trader would pay for the watch.

6. John and his young daughter travelled from Kampala to Nairobi by bus. John paid K. shs 1,500 and the daughter paid K. shs 750.

The exchange rate was :
1 Kenya shillings (K. shs) =24 Uganda shillings.
(a) Work out the bus fare in Uganda shillings which each of them paid.   (2 marks)

(b) If John had Ug. shs 102,00 at the beginning of the journey, what was his balance in Kenya shillings after paying bus fare for himself and the daughter?   (4 marks)

7. Maria has a bundle of five thousand shillings notes numbered consecutively from AP 534201 TO AP 534300. How much money does she have?

8. The rates at which a bank buys and sells United States dollars and Kenya shillings are given table below.

Currency	Rate at which a bank buys	Rates at which a bank sells
One U.S Dollar	shs3Ug. shs 2,8000	Ug. Shs 2,900
One Kenya shilling	Ug. Shs 28	Ug.shs30

(a) If a trader has 300 dollars and 500 Kenya shillings, how much money in Uganda shillings can he get from the bank?   (4 marks)

(b) Peter has Ug. Shs 1,160,000, how many U.S dollars can he get from the bank? (2 marks)

9. The exchange rate for Kenya shillings (K shs) to Uganda shillings (Ug.sh) and the United States dollars (US$) to Uganda shillings are shown below.

K shs 1 =Ug. shs 30
US$1= Ug. sh2,580

(a) How man United States dollar will one get from 21,500 Kenya shillings?

(b) If the cost a new bicycle is 90 United States dollars, how much would this be in Uganda shillings.

(02marks)

10. The table below shows the rate at which different currencies were sold and bought in a commercial bank during the month of September.

Use it to answer the question that following.

currency	Selling in Ug. Sh.	Buying in ug.sh.
1 US dollar ($)	3,600	3,650
1Euro (€)	4,000	4,020
1 Rwandese franc	4.0	5.0

(a) How many Euros Musa get for Ug. shs.603, 000? (02 mark)

(b) Amina came from Rwanda with 109,500 Rwandese francs and exchanged them for US dollar. How many US dollar did she get from the bank?   (03mark)

11. Given that 1 US dollar ($) costs Uganda shillings (Ug. Sh) 3, 672 and 1 Kenya shilling (Ksh) costs Ug.sh 36, find the cost of 1US dollar in Kenya shillings.

1. Muke was given a bundle of 50-shillings notes. If a bundle contains 100 notes, how much money was Muke given?

> The amount given = 50 x 100 = 5000/=

2. If the cost of buying 300 Kenya Shillings is 6,000 Uganda Shillings, how many Kenya Shillings can 42,000 Uganda Shillings buy?

> 6000 Uganda shillings by 300 Kenya shillings
>
> 42,000 Uganda shillings will by $\frac{300 \ x \ 42000}{6000} = 2100 \ Kenya \ shillings$

Given that the exchange rate of United States dollars to Uganda shillings is US $ 1 to Ug. Sh. 1,800 and that the exchange rate of the Kenya shillings to Uganda shillings is K. sh. 1 to Ug. Sh.23. How much money in Uganda shillings do I have in total if I have US $ 85 and K.sh. 12,500?

Change $ 85 to Uganda shillings = 85 x 1800	= 153000
Change K.shs 12500 to Uganda shillings = 12500 x 23	= 287500
Total Uganda shillings	= 440500

3. Peter was given a bundle of one thousand shilling notes numbered from OR447500 to OR447699 consecutively. How much money did Peter get?

Number of notes = (447699 – 447500) + 1 = 200

Amount of money = 200 x 100 = 20,000

4. A farmer banked Shs. 3 million in Nile bank. If he banked 20,000-shilling notes, how many notes did he bank?

Number of notes $=\frac{total \ amount}{amount \ per \ note} = \frac{3000000}{20000} = 150$

5. A trader has various amounts of money in the following currencies.

> 200 United States dollars (US$)
> 100 Kenya shillings (K.shs.)
> 500,000 Uganda shillings (Ug.Shs)
> Given that the existing exchange rate are
> US$ 1= Ug Shs.1850
> K. Shs 1 = Ug Shs. 25

(c) Find the total amount of amount of money in Uganda shillings, trader has.

Amount	Rate	Total
200$	1$ = Ug. Shs 1850	370,000
K. shs. 100	1K. shs = Ug shs. 25	2,500
Ug. Shs. 500,000	1	500,000
Total		**872,500**

(d) If a watch cost K shs. 1,480. Find how many US. Dollars the trader would pay for the watch.

Change K. shs into Uganda Shillings

1K. shs. = 25 Ug. Sh

1,480 K. shs. = 25 x 1480 = 37, 000

Convert Ug. Shs. To US dollars

1850Ug. Shs = 1$

$37000 \text{ Ug. Shs} = \frac{37000}{1850} = 20\$$

6. John and his young daughter travelled from Kampala to Nairobi by bus. John paid K. shs 1,500 and the daughter paid K. shs 750.

The exchange rate was :
1 Kenya shillings (K. shs) =24 Uganda shillings.
(c) Work out the bus fare in Uganda shillings which each of them paid.   (2 marks)

John paid K.shs. 1500 = Ug Shs 24 x 1500 = Ug. Shs 36000
Hence John paid Ug. Shs 36,000

Daughter paid K.shs. 750 = Ug Shs 24 x 750 = Ug. Shs 18,000
Hence daughter paid = Ug. Shs 18,000

(d) If john had Ug. shs 102,00 at the beginning of the journey, what was his balance in Kenya shillings after paying bus fare for himself and the daughter?   (4 marks)

Total fare in Ug. shs = 36000 + 18000
$$= 54000$$
John's balance in Ug. Shs. = 102,000 – 54,000
$$= 48000$$
John's balance in K. shs.
Ug. Shs. 24 = K.shs. 1

$\therefore$ Ug. Shs. 48000 = $\frac{48000}{24} = K.shs. 2,000$

$\therefore$ John's balance in Kenya shillings = 2,000/=

7. Maria has a bundle of five thousand shillings notes numbered consecutively from AP 534201 TO AP 534300. How much money does she have?

The number of shs 5000 notes= (534300 – 534201) + 1 = 99+ 1 = 100

NB: we add 1 because 534201 is inclusive.

100 notes of shs. 5000 give 100 x 5000 = 500000.

8. The rates at which a bank buys and sells United States dollars and Kenya shillings are given table below.

Currency	Rate at which a bank buys	Rates at which a bank sells
One U.S Dollar	shs3Ug. shs 2,8000	Ug. Shs 2,900
One Kenya shilling	Ug. Shs 28	Ug.shs30

(c) If a trader has 300 dollars and 500 Kenya shillings, how much money in Uganda shillings can he get from the bank?   (4 marks)

Changing dollars to shillings = 300 = 2800   = 840000
Changing Kenya shillings to Uganda shilling   = 500 x 28
                                                     = 14000

Total   = 852,000

(d) Peter has Ug. Shs 1,160,000, how many U.S dollars can he get from the bank? (2 marks)

Shs. 2900 buys 1 dollar

Shs. 1,160, 000 will by $\frac{11600 \times 1}{2900} = 400 dollars$

9. The exchange rate for Kenya shillings (K shs) to Uganda shillings (Ug.sh) and the United States dollars (US$) to Uganda shillings are shown below.

K shs 1 =Ug. shs 30
US$1= Ug. sh2,580

(c) How man United States dollar will one get from 21,500 Kenya shillings?

First convert Kenya's shillings into Uganda shillings

1 Kshs.   = 30 Ug. Shs

∴ 21, 500 Kshs = 21,500 x 30 Ug. Shs. = 645000 Ug. Shs.

Then convert Uganda shillings into US Dollars

1 Ug. Shs.   buys $\frac{1}{2850}$

∴ 645000 buy $\frac{1}{2850}$ x 64500 $= 250$ US $dollars$.

(d) If the cost a   in Uganda
    shillings.

(02marks)

1 US Dollar is sold 2,580 Ug. Shs.

∴ 90 US Dollar cost 90 x 2580 = 232200 Uganda shillings

10. The table below shows the rate at which different currencies were sold and bought in a commercial bank during the month of September.

Use it to answer the question that following.

currency	Selling in Ug. Sh.	Buying in ug.sh.
1 US dollar ($)	3,600	3,650
1Euro (€)	4,000	4,020
1 Rwandese franc	4.0	5.0

(c) How many Euros Musa get for Ug. shs.603, 000? (02 mark)

Shs. 4,020 buy 1 Euro

∴ shs. 60300 buy: $\frac{603000}{4020} = 150$ Euros

(d) Amina came from Rwanda with 109,500 Rwandese francs and exchanged them for US dollar. How many US dollar did she get from the bank?   (03mark)

First find the money in Uganda shilling and then buy US dollars

1 Rwanda franc is equivalent to Ug shs. 4.0

∴ 109500 Rwandese fracs ≡ 4 x 109500

$= 438000$

Then buy UD dollar using Uganda shillings

Ug. Shs 3,650 buy 1 US dollar
∴ 547500 will buy $\frac{438000}{3650} = 120 \ US \ dollars$

11. Given that 1 US dollar ($) costs Uganda shillings (Ug. Sh) 3, 672 and 1 Kenya shilling (Ksh) costs Ug.sh 36, find the cost of 1US dollar in Kenya shillings.

1 US dollar = $\frac{3672}{36}$ = 102 K sh.