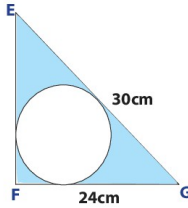


## SECTION B

22. Figure EFG below shows a circle inscribed in a triangle.



What is the height EF?

(b) Calculate the radius of the circle if the area of the shaded part is  $62\text{cm}^2$ . (Use  $\pi$  as  $\frac{22}{7}$ )

24 Musoni used his salary as follows:  $\frac{1}{3}$  on fees,  $\frac{1}{4}$  on transport,  $\frac{1}{8}$  on Clothes and saved the rest. He saved sh.280,000

a) Find the fraction saved.

b) How much was his salary?

25(a) Using a ruler and a pair of compasses only, construct a triangle XYZ in which  $XY = 7.4\text{cm}$  and angle  $YXZ = 30^\circ$  and angle  $XYZ = 75^\circ$

b) Measure YZ.  
YZ = .....cm

26. a) Solve:  $0.8(h - 2) - 0.25(h - 6) = 1$

(b) Abalo is 18 year old while Nakiwala is 4 years old. In how many years time will Nakiwala be half as old as Abalo?

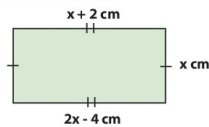
27. Jacob went shopping and bought the following items;

- 2 loaves of bread at sh. 5,500 per loaf.
- 3 bars of soap for sh. 6,200 per bar
- $2\frac{1}{2}$  kgs of salt for sh. 600 per 500g.

(a) What was his total expenditure?

(b) If he was given 10% discount, how much did he pay for all the items.

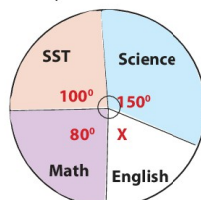
29. Use the diagram below to answer the questions that follow.



(a) Find the value of x.

(b) Work out the area of the rectangle.

28. The pie - chart below shows the number of the number of boxes of books in a store. Study it and answer the questions that follow.



(a) Find the value of X.

(b) If there 12 more boxes for science than English, how many boxes are in the store altogether?

(c) Express the number of boxes for Maths as a percentage of the total numbers of boxes in the store.

30(a) A regular polygon has one of its exterior angle of  $40^\circ$ .

(i) How many sides has the polygon?

(ii) How many right angles does the polygon have?

(iii) What is the interior angle sum of the polygon?

31. A tank is exposed to three taps; tap A can fill the tank in 8 minutes, tap B can fill the same tank in 6 minutes while tap C can empty the tank in 4 minutes.

(a) How much time will the taps take to fill the tank if all the three taps are open at the same time?

32(a) Using a ruler, pencil and a pair of compasses and a pencil only, construct a triangle ABC in which  $AB = 8\text{cm}$ ,  $BC = 6\text{cm}$  and angle  $ABC = 120^\circ$ .

(b) Measure Length AC