

Question 10 (10)

Solution:

veggie : 5 = 40 students

∴ For chicken; we have 3.5

∴ If 5 = 40
3.5

Therefore, we have;

$$\frac{3.5 \times 40}{5} = 28 \text{ students said chicken.}$$

Question 12

For spinner, we have B G R W

When a coin is tossed, we have HT

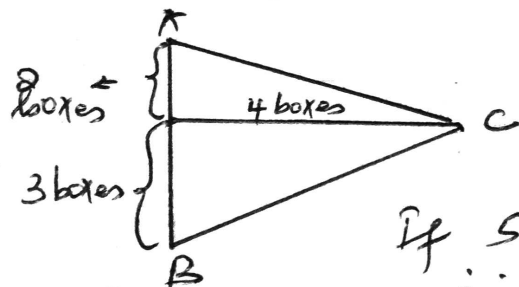
∴ When both are spinned/spun and tossed,

we have;

BH, BT, GH, GT, RH, RT, WH, WT

Question 20

a) Scale 1: 30,000



If 5 boxes = 1500 m

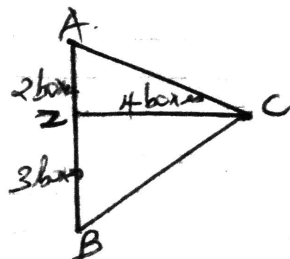
Which means, 5 boxes = 150000 cm

$$\therefore 1 \text{ box} = \frac{150000}{5}$$

∴ We have 1: 30,000, shown. = 30,000 cm

Question 20

b) Actual distance between A and C



If 1 box = 30,000 cm

∴ 2 boxes

$$= \frac{2 \text{ boxes} \times 30,000 \text{ cm}}{1 \text{ box}}$$

$$= 60,000 \text{ cm}$$

Converting it into km, we have

$$\text{km} = \frac{60,000 \text{ cm}}{100,000 \text{ cm}}$$

Therefore, Distance AC = 0.6 km

Question
20 Continuation

Next, we check the distance with 4 boxes that is, distance $C \rightarrow Z$.

Since 1 box = 30,000 cm
 $\therefore$ 4 boxes ??

$$\frac{4 \text{ boxes} \times 30,000 \text{ cm}}{1 \text{ box}} = 120,000 \text{ cm}.$$

Converting to km,
If 1 km = 100,000 cm
?? = 120,000 cm

$$\frac{1 \text{ km} \times 120,000 \text{ cm}}{100,000 \text{ cm}} \quad C \rightarrow Z = 1.2 \text{ km}$$

Using Pythagoras Theorem;

$$AC = \sqrt{0.6^2 + 1.2^2}$$

$$= \sqrt{1.8} = 1.342 \text{ km}$$

Question 25

g) having the points that give line of best fit

High jump	Long jump
185	560
178	550
175	546
172	542
157	520
148	506

Looking at these points trend, an increase in high jump leads to a corresponding increase in long jump. Therefore, this shows that there is a Positive Correlation between high jump and long jump.

Question 25

b) Liam has a high jump of 166 cm.

Therefore, having the line of best fit, we can estimate the long jump corresponding to 166 cm as 532 cm on long jump.

c) The reason why we cannot use the line of best fit to estimate boy's 195 cm high jump or long jump is because the line of best fit ends at 185 cm. Therefore, it is not possible.