

Exercise 1.3

Question 1:-

On his last bank statement, Qasim had a balance of Rs. 1,75,000 in his checking account. He wrote one cheque for Rs. 45,790 and another for Rs. 112,921. What is his current Balance?

Total amount in account = 175,000

Total withdrawal amount = 45,790 + 112,921
= 158,711

Remaining amount = 175,000 - 158,711
= Rs. 16,289

Question No 2:-

Last week Wajid drove 283.4 km on 16.2 liters of petrol. He says that he averaged about 1.75 km/liter. Is his answer reasonable? Explain

Distance covered = 283.4 km

Petrol consumed = 16.2 Liters

Wajid's average = 1.75 km/liter

Actual average = $\frac{283.4}{16.2}$
= 17.49 km/liters.

"There is a huge difference between wajid's average and actual average, hence his answer is not reasonable"

Question No 3:-

Salma bought 3.2 yard of fabric for a total price of Rs. 139.2. How much did the fabric cost per yard?

Price of 3.2 yard fabric = Rs 139.2

Price of 1 yard fabric = $\frac{139.2}{3.2}$

$$= \text{Rs } 43.5$$

Momina walks 3.5 km/h. She took a 12h walk. How far did she walk.

Question No 4:-

Walking Speed = 3.5 km/h

Time = 12h

$$\begin{aligned} \text{Distance} &= \text{Speed} \times \text{time} \\ &= 3.5 \times 12 \\ &= 42 \text{ km} \end{aligned}$$

Question No 5:-

A hiking club went on a 7 day trip. Each day they hiked between 5.5 and 7.5 miles. It is reasonable to assume that clubbing the days the club hiked.

- a) Less than 35 miles.
- b) Between 35 and 55 miles.
- c) Equally 55 miles
- d) More than 55 miles

Total trip days = 7

Each days walked = 5.5 to 7.5 miles

$$\begin{aligned} \text{Total distance hiked} &= 5.5 \times 7 \text{ to } 7.5 \times 7 \\ &= 38.5 \text{ to } 52.5 \end{aligned}$$

"Option b is more reasonable answer"

Question No 6

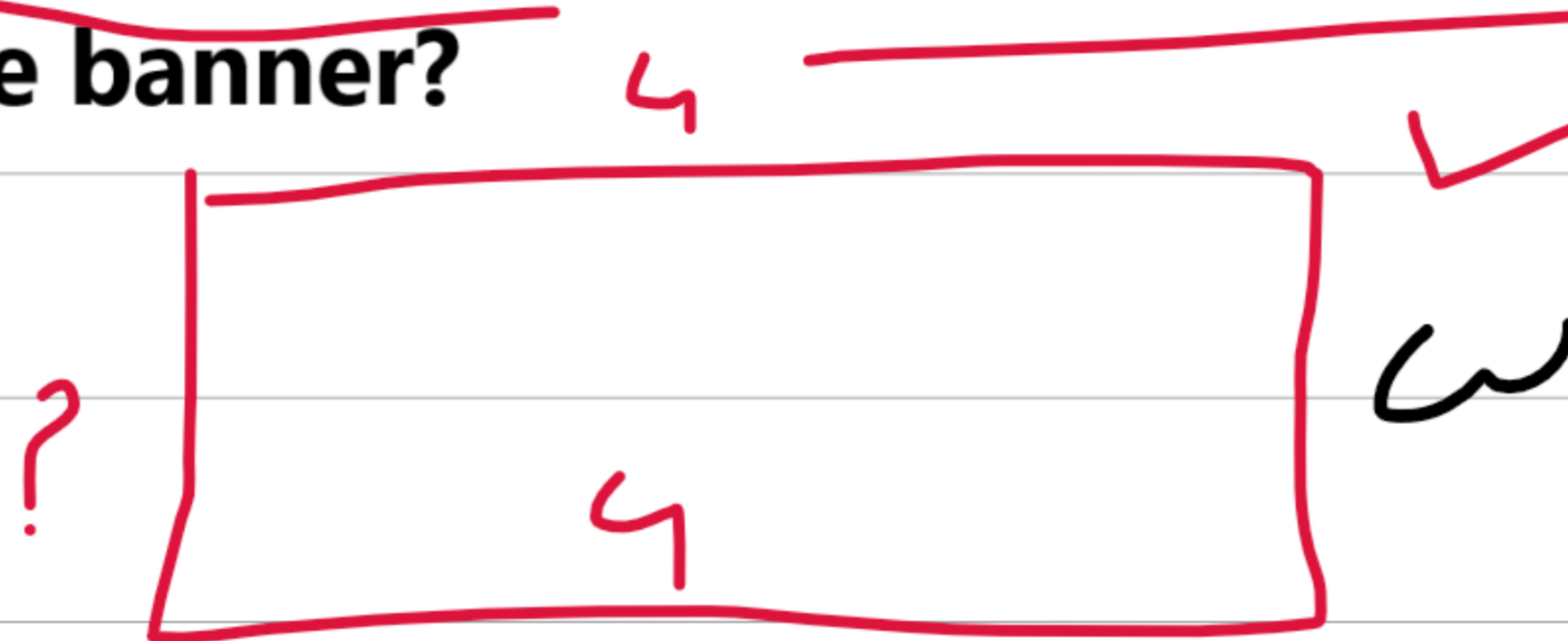
For a class party the students council purchased 42 balloons at Rs. 1.85 what is the total amount the student council paid for the balloons?

$$\text{Price of one balloon} = \text{Rs } 1.85$$

$$\begin{aligned}\text{Price of 42 balloons} &= 42 \times 1.85 \\ &= \text{Rs } 77.7\end{aligned}$$

Question No 7:-

A group of friends made 4 yard long rectangular banner. They paid 3.75 per yard for the fabric and Rs. 9 for the firm to go around the banner, 10-yard perimeter. What was the width of the banner?



$$\text{let width} = w$$

$$\text{length} = 4$$

$$\text{perimeter} = 10$$

$$\text{perimeter} = 2(l + w)$$

$$10 = 2(4 + w)$$

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

$$5 = 4 + w$$

$$5 - 4 = w \rightarrow \boxed{w = 1}$$

Question No 8:-

A shoe factory has an asset for Rs. 2000000 of which $\frac{3}{5}$ is the capital and rest is debt. Find the amount of capital and debt
(Assets = capital + debt)

$$\text{Asset} = 2000000$$

$$\text{Capital} = \frac{3}{5} \times 2000000$$

$\leftarrow 400000$

$$\text{Capital} = 1200000$$

"To Find debt we use"

$$\text{Asset} = \text{Capital} + \text{debt}$$

$$\text{debt} = \text{Asset} - \text{Capital}$$

$$= 2000000 - 1200000$$

$$= 800000 \text{ (RS)}$$

Question No. 9

World Lowest temperature in past 100 years was recorded -89.2°C at Vostok, Antarctica on July 21, 1983. Convert this temperature into Fahrenheit and Kelvin scale. $F = \frac{9}{5} C + 32$, $K = C + 273$

To convert $^\circ\text{C}$ to Fahrenheit

$$\text{Temperature} = -89.2^\circ\text{C}$$

$$\text{Fahrenheit} = \frac{9}{5} C + 32$$

$$= \frac{9}{5} \times (-89.2) + 32$$

$$= \frac{-802.8}{5} + 32$$

$$= -160.56 + 32$$

$$= -128.56 \text{ Fahrenheit}$$

To convert $^{\circ}\text{C}$ to Kelvin

$$K = ^{\circ}\text{C} + 273$$

$$K = -89.2 + 273$$

$$K = 183.8 \text{ Kelvin}$$

Question No 10:-

10. A company was penalized by the government act for low quality production. If the company has 3 share holders. Farah, Maryam and Tehreem investing in the ratios of 1 : 2 : 3 and the amount of penalty is Rs. 456,868.97. Find the amount of penalty paid by each of 3 share holders.

$$\text{Total penalty} = 456,868.97$$

$$\begin{aligned} \text{Sum of ratios} &= 1 + 2 + 3 \\ &= 6 \end{aligned}$$

$$\begin{aligned} \text{Share of Farah} &= \frac{1}{6} \times 456,868.97 \\ &= 76144.82 \end{aligned}$$

$$\begin{aligned} \text{Share of Maryam} &= 2 \times 76144.82 \\ &= 152289.64 \end{aligned}$$

$$\text{Share of Tehseem} = 3 \times 76144.82$$
$$= 228434.46$$