

PARAGON CONVENT SCHOOL

SECTOR – 24 B , CHANDIGARH

ANSWER KEY

CLASS – 7

SUB – MATHS

Q-1. Convert the following into decimal numbers .

a. $\frac{13}{4} = 3.25$

b. $\frac{83}{10} = 8.3$

c. $7\frac{3}{5} = \frac{38}{5} = 7.6$

Q-2. Convert the following into decimals .

a. $\frac{2}{3} = 0.666.. = 0.\overline{6}$

c. $1\frac{7}{9} = \frac{16}{9} = 1.7777... = 1.\overline{7}$

e. $7\frac{1}{12} = \frac{85}{12} = 7.083333.. = 7.08\overline{3}$

Q-4 Javed,s camera is loaded with a new roll of film. The film can take 72 exposures . During the class picnic , he took 48 pictures . what part of the film is left to be exposed ? Express this as a rational no as well as decimal no .

Sol : Total pictures in camera = 72

He took = 48

Left pictures = $72 - 48 = 24$

In rational form = $\frac{24}{72} = \frac{1}{3}$

In decimal = $0.3333... = 0.\overline{3}$

Q-5 In a market the cost of a coffee is Rs 240. One shopkeeper advertises coffee at $\frac{1}{5}$ off and another shopkeeper offers $\frac{1}{10}$ off . Which of the two is a better buy ? what is the difference in the price at which they are sold ?

Sol : Cost of the coffee = Rs 240

$$\text{Offer given by 1}^{\text{st}} \text{ shopkeeper} = \frac{1}{5} \text{ off } 240 = \frac{1}{5} \times 240 = \text{Rs } 48$$

$$\text{Offer given by 2}^{\text{nd}} \text{ shopkeeper} = \frac{1}{10} \text{ off } 240 = \frac{1}{10} \times 240 = \text{Rs } 24$$

1st shopkeeper gives better offer

$$\text{Difference} = 48 - 24 = \text{Rs } 24$$

Q-7. In a theatre, for a show $\frac{1}{2}$ the audience were women and $\frac{1}{3}$ of these women were school girls. If the total audience were 600 in theatre, how many were school girls?

Sol : Total audience in theatre = 600

$$\text{No of women} = \frac{1}{2} \text{ of total audience} = \frac{1}{2} \times 600 = 300$$

$$\text{No of school girls} = \frac{1}{3} \text{ of women} = \frac{1}{3} \times 300 = 100$$

Q-10 In the construction of a road of length 11km, the contractor completed $\frac{13}{5}$ km in the 1st stage and in the 2nd stage he constructed $\frac{33}{10}$ km. What is the length of the remaining part of the road to be constructed?

Sol : Total length of the road = 11km

A . T . Q . = left length = Total length – (length completed in 1st stage + length completed in 2nd stage)

$$\begin{aligned} & 11 - \left(\frac{13}{5} + \frac{33}{10} \right) \\ & = 11 - \left(\frac{26}{10} + \frac{33}{10} \right) \\ & = \frac{110}{10} - \frac{59}{10} = \frac{51}{10} = 5 \frac{1}{10} \text{ km} \end{aligned}$$

Q-11. A baker baked three types of cakes weighing $\frac{58}{3}$ kg altogether. If he baked $\frac{73}{9}$ kg of fruit cake and $\frac{19}{6}$ of chocolate cake and the remaining sponge cake, what was the quantity of sponge cake ?

Sol : Total weight of cake = $\frac{58}{3}$ kg

A. T. Q . = sponge cake = total cake - (fruit cake + chocolate cake)

$$\begin{aligned} & \frac{58}{3} - \left(\frac{73}{9} + \frac{19}{6} \right) \\ = & \frac{58}{3} - \left(\frac{146}{18} + \frac{57}{18} \right) \\ = & \frac{348}{18} - \frac{203}{18} = \frac{145}{18} = 8\frac{1}{18} \text{ kg} \end{aligned}$$