

Topic-10: Extend Multiplication Concepts to Fractions

Question 1: Write each fraction as a multiple of a unit fraction:

$$\text{a) } \frac{2}{10} = 2 \times \frac{\square}{\square}$$

$$\text{b) } \frac{5}{2} = 5 \times \frac{\square}{\square}$$

$$\text{c) } \frac{3}{8} = \square \times \frac{1}{8}$$

$$\text{d) } \frac{99}{100} = 99 \times \frac{1}{\square}$$

Question 2: Multiply a whole number with fraction:

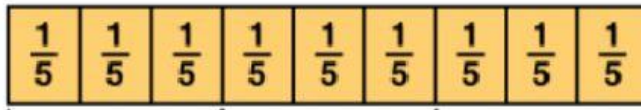
$$\text{a) } 2 \times \frac{3}{4} = \frac{\square}{4} = 1 \frac{\square}{4}$$

$$\text{b) } 7 \times \frac{2}{15} = \frac{\square}{\square}$$

$$\text{c) } 8 \times \frac{2}{5} = \frac{\square}{5} = \square \frac{1}{5}$$

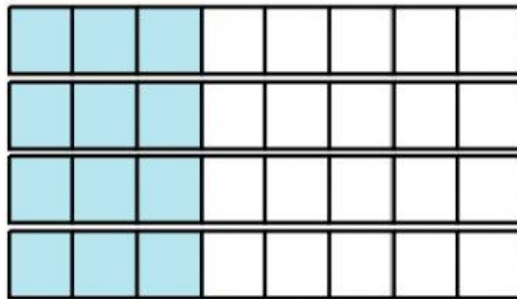
Question 3: Solve each of the following:

a)



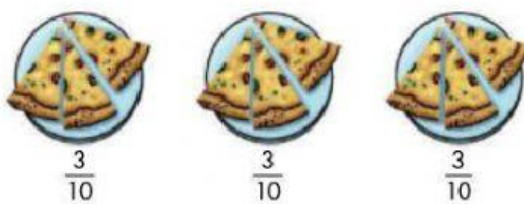
Answer: $b = \square \times \frac{\square}{\square}$

b)



Answer: $m = \square \times \frac{\square}{\square}$

c)



Answer: $m = \square \times \frac{\square}{\square}$

d)

$$2 \times 1\frac{2}{5} = \square \frac{4}{5}$$

e)

$$2 \times 3\frac{4}{10} = 6 \frac{\square}{10}$$

f) Calculate the distance Chris swims if he swims $\frac{3}{50}$ mile each day for 10 days. Write and solve multiplication equation.

Answer:

$$m = \square \times \frac{\square}{\square} = \frac{\square}{\square} \text{ mile}$$

g) Calculate the distance Laurens jogs if she jogs $\frac{1}{5}$ mile each day for 6 days.
Write and solve multiplication equation.

Answer:

$$j = \square \times \frac{\square}{\square} = \frac{\square}{\square} = \square \frac{1}{5} \text{ miles}$$

Solve each of the following time problem:

a)

$$\begin{array}{r} 5 \text{ hours} \quad \text{-----} \quad 25 \text{ minutes} \\ + 2 \text{ hours} \quad \text{-----} \quad 46 \text{ minutes} \\ \hline \square \text{ hours} \quad \quad \quad \square \text{ minutes} \end{array}$$

b) $20 \text{ weeks} = \square \text{ days}$
 $\times 7$

c) $648 \text{ months} = \square \text{ years}$
 $\div 12$