

1.5 Answers

1.5.1 Solution to 1.2 Exercise

Answer 1

$$\frac{5}{7}$$

Answer 2

- (i) 7 is the numerator
(ii) 8 is the denominator

Answer 3

$$\frac{3}{5} \text{ of a pizza}$$

[1, 1, 1, 2 marks]

Answer 4

$$\frac{5}{8} \text{ of a cake}$$

Answer 5

(i) $\frac{7}{9}$ of the cake (ii) $\frac{1}{3}$ because $\frac{3}{9} = \frac{1}{3}$

[2, 2, 3 marks]

1.5.2 Solution to 1.4 Exercise

Answer 1

$$\begin{aligned} \frac{1}{2} + \frac{1}{8} &= \frac{1}{2} \times \textcolor{red}{1} + \frac{1}{8} && \text{Step 1: Multiply by 1} \\ &= \frac{1}{2} \times \frac{\textcolor{red}{4}}{\textcolor{red}{4}} + \frac{1}{8} && \text{Step 2: Write 1 in a more useful way} \\ &= \frac{4}{8} + \frac{1}{8} && \text{Step 3: Do the multiplication} \\ &= \frac{5}{8} && \text{Step 4: Do the common denominator addition} \end{aligned}$$

[4 marks]

Answer 2

$$\begin{aligned} \frac{2}{5} + \frac{3}{10} &= \frac{2}{5} \times \textcolor{red}{1} + \frac{3}{10} && \text{Step 1: Multiply by 1} \\ &= \frac{2}{5} \times \frac{\textcolor{red}{2}}{\textcolor{red}{2}} + \frac{3}{10} && \text{Step 2: Write 1 in a more useful way} \\ &= \frac{4}{10} + \frac{3}{10} && \text{Step 3: Do the multiplication} \\ &= \frac{7}{10} && \text{Step 4: Do the common denominator addition} \end{aligned}$$

[4 marks]

Answer 3

$$\begin{aligned} \frac{2}{3} + \frac{1}{9} &= \frac{2}{3} \times \textcolor{red}{1} + \frac{1}{9} && \text{Step 1: Multiply by 1} \\ &= \frac{2}{3} \times \frac{\textcolor{red}{3}}{\textcolor{red}{3}} + \frac{1}{9} && \text{Step 2: Write 1 in a more useful way} \\ &= \frac{6}{9} + \frac{1}{9} && \text{Step 3: Do the multiplication} \\ &= \frac{7}{9} && \text{Step 4: Do the common denominator addition} \end{aligned}$$

[4 marks]

Answer 4

$$\begin{aligned}
\frac{3}{5} + \frac{7}{20} &= \frac{3}{5} \times \mathbf{1} + \frac{7}{20} \\
&= \frac{3}{5} \times \frac{\mathbf{4}}{\mathbf{4}} + \frac{7}{20} \\
&= \frac{12}{20} + \frac{7}{20} \\
&= \frac{19}{20}
\end{aligned}$$

Step 1: Multiply by 1

Step 2: Write 1 in a more useful way

Step 3: Do the multiplication

Step 4: Do the common denominator addition

[4 marks]**Answer 5**

$$\begin{aligned}
\frac{1}{2} - \frac{1}{8} &= \frac{1}{2} \times \mathbf{1} - \frac{1}{8} \\
&= \frac{1}{2} \times \frac{\mathbf{4}}{\mathbf{4}} - \frac{1}{8} \\
&= \frac{4}{8} - \frac{1}{8} \\
&= \frac{3}{8}
\end{aligned}$$

Step 1: Multiply by 1

Step 2: Write 1 in a more useful way

Step 3: Do the multiplication

Step 4: Do the common denominator subtraction

[4 marks]**Answer 6**

$$\begin{aligned}
\frac{4}{5} - \frac{8}{15} &= \frac{4}{5} \times \mathbf{1} - \frac{8}{15} \\
&= \frac{4}{5} \times \frac{\mathbf{3}}{\mathbf{3}} - \frac{8}{15} \\
&= \frac{12}{15} - \frac{8}{15} \\
&= \frac{4}{15}
\end{aligned}$$

Step 1: Multiply by 1

Step 2: Write 1 in a more useful way

Step 3: Do the multiplication

Step 4: Do the common denominator subtraction

[5 marks]