Year 6 Fractions topic test

12 questions | 23 marks | 30 minutes

A hand-solvable review that progresses from familiar skills to explanation and practical problems.

Equivalent correct methods earn the corresponding marks.

1. Complete $\frac{3}{4} = \frac{?}{20}$. [1 mark]

Multiply numerator and denominator by 5.

Answer: 15.

2. Simplify $\frac{15}{25}$. [1 mark]

Divide both counts by 5.

Answer: $\frac{3}{5}$.

3. Which is greater: $\frac{4}{5}$ or $\frac{7}{10}$? [2 marks]

$\frac{4}{5} = \frac{8}{10}$, which exceeds $\frac{7}{10}$.

Answer: $\frac{4}{5}$.

4. Order $\frac{1}{3}$, $\frac{3}{4}$ and $\frac{1}{2}$ from least to greatest. [2 marks]

Use twelfths: $\frac{4}{12}$, $\frac{9}{12}$ and $\frac{6}{12}$.

Answer: $\frac{1}{3}, \frac{1}{2}, \frac{3}{4}$.

5. Calculate $\frac{2}{7} + \frac{3}{7}$. [1 mark]

Add the counts of equal sevenths.

Answer: $\frac{5}{7}$.

6. Calculate $\frac{1}{3} + \frac{1}{2}$. [2 marks]

$\frac{2}{6} + \frac{3}{6} = \frac{5}{6}$.

Answer: $\frac{5}{6}$.

7. Calculate $\frac{7}{8} - \frac{1}{3}$. [2 marks]

$\frac{21}{24} - \frac{8}{24} = \frac{13}{24}$.

Answer: $\frac{13}{24}$.

8. Calculate $1\frac{1}{2} - \frac{3}{4}$. [2 marks]

$1\frac{1}{2} = \frac{6}{4}$; $\frac{6}{4} - \frac{3}{4} = \frac{3}{4}$.

Answer: $\frac{3}{4}$.

9. Find $\frac{3}{5}$ of 45 stickers. [2 marks]

$45 \div 5 = 9$; $3 \times 9 = 27$.

Answer: 27 stickers.

10. A rope is $2\frac{1}{4}$ metres long. A piece $\frac{5}{6}$ metre long is removed. How much remains? [3 marks]

$\frac{9}{4} - \frac{5}{6} = \frac{27}{12} - \frac{10}{12} = \frac{17}{12}$.

Answer: $1\frac{5}{12}$ m.

11. Two fifths of a garden cover 18 square metres. Find its whole area. [3 marks]

One fifth is $18 \div 2 = 9$; five fifths is $5 \times 9 = 45$.

Answer: 45 square metres.

12. Finn says $\frac{1}{4} + \frac{1}{4} = \frac{2}{8}$. Correct the answer and explain the error. [2 marks]

The pieces remain quarters; adding their count does not change their size.

Answer: $\frac{1}{4} + \frac{1}{4} = \frac{2}{4} = \frac{1}{2}$.