Equivalent fractions

6 questions | 10 marks

Equivalent correct methods earn the corresponding marks.

1. Complete $\frac{1}{2} = \frac{?}{8}$. [1 mark]

The denominator is multiplied by four, so the numerator is also multiplied by four.

Answer: 4

2. Complete $\frac{3}{7} = \frac{12}{?}$. [1 mark]

Three is multiplied by four. Seven times four is twenty-eight.

Answer: 28

3. Write $\frac{10}{15}$ in simplest form. [2 marks]

Both numbers have common factor five. Divide both by five.

Answer: $\frac{2}{3}$

4. Write the shaded fraction in simplest form. [2 marks]

One whole 

Six of sixteen parts are shaded: $\frac{6}{16}$.

Divide both numbers by two.

Answer: $\frac{3}{8}$

5. Lee says $\frac{4}{6} = \frac{8}{9}$. Is Lee correct? Explain without using a decimal. [2 marks]

Doubling $\frac{4}{6}$ would give $\frac{8}{12}$, not $\frac{8}{9}$.

The numerator and denominator were not scaled by the same factor.

Answer: No.

6. A garden has twenty equal plots. Eight grow beans. What fraction grows beans? Give a simplest-form answer. [2 marks]

The fraction is $\frac{8}{20}$.

Divide both numbers by four to get two fifths.

Answer: $\frac{2}{5}$