Multiplying/dividing fractions

6 questions | 15 marks

Equivalent correct methods earn the corresponding marks.

1. $\frac{2}{5} \times \frac{3}{4}$ [2 marks]

$\frac{6}{20} = \frac{3}{10}$.

Answer: $\frac{3}{10}$

2. $\frac{7}{9} \times \frac{3}{14}$ [2 marks]

Cancel 7 with 14 and 3 with 9 to obtain $\frac{1}{3} \times \frac{1}{2}$.

Answer: $\frac{1}{6}$

3. $\frac{5}{6} \div \frac{1}{3}$ [2 marks]

$\frac{5}{6} \times 3 = \frac{15}{6} = \frac{5}{2}$.

Answer: $2\frac{1}{2}$

4. $1\frac{1}{2} \times \frac{4}{5}$ [2 marks]

$\frac{3}{2} \times \frac{4}{5} = \frac{12}{10} = \frac{6}{5}$.

Answer: $1\frac{1}{5}$

5. $2\frac{1}{4} \div \frac{3}{8}$ [3 marks]

$\frac{9}{4} \times \frac{8}{3} = \frac{72}{12} = 6$.

Answer: 6

6. A $2\frac{1}{2}$ m ribbon is cut into $\frac{3}{4}$ m pieces. How many complete pieces fit, and what length remains? [4 marks]

$\frac{5}{2} \div \frac{3}{4} = \frac{10}{3} = 3\frac{1}{3}$, so only three complete pieces fit.

$\frac{5}{2} - 3 \times \frac{3}{4} = \frac{1}{4}$ m.

Answer: 3 complete pieces; one quarter of a metre remains.