

GCSE Maths: Multiplying fractions (Foundation): answers

GCSE Maths - Fractions - Foundation - Lesson 3.6

Answers. Final answers to the worksheet questions. Full step-by-step solutions for every question are free at websink.site/gcse/maths/ch03-fractions/foundation/multiplying-fractions/

Exercise 3F Multiplying fractions Non-calculator

1 Work out. Give each answer in its simplest form.

(a) $\frac{1}{2} \times \frac{1}{3}$

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

(b) $\frac{2}{5} \times \frac{3}{7}$

Answer: $\frac{6}{35}$

(c) $\frac{3}{4} \times \frac{2}{9}$

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

(d) $\frac{4}{5} \times \frac{3}{8}$

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

(e) $\frac{5}{6} \times \frac{3}{10}$

Answer: $\frac{1}{4}$

(f) $\frac{7}{9} \times \frac{3}{14}$

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

2 Work out.

(a) $3 \times \frac{2}{5}$

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

(b) $4 \times \frac{3}{8}$

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

(c) $6 \times \frac{5}{9}$

Answer: $3\frac{1}{3}$

(d) $\frac{2}{3} \times 12$

Answer: 8

(e) $\frac{5}{7} \times 14$

Answer: 10

(f) $\frac{3}{4} \times 10$

Answer: $7\frac{1}{2}$

3 Work out. Give each answer as a mixed number or fraction in its simplest form.

(a) $1\frac{1}{2} \times \frac{2}{3}$

Answer: 1

(b) $2\frac{1}{4} \times 1\frac{1}{3}$

Answer: 3

(c) $3\frac{1}{3} \times 1\frac{4}{5}$

Answer: 6

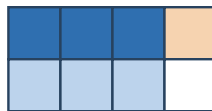
(d) $2\frac{2}{5} \times 1\frac{1}{4}$

Answer: 3

(e) $1\frac{3}{4} \times 2\frac{2}{7}$

Answer: 4

4 Use the diagram to work out $\frac{1}{2} \times \frac{3}{4}$.



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

5 A rectangle has length $\frac{3}{4}$ m and width $\frac{2}{3}$ m. Work out its area.

Answer: $\frac{1}{2}$ m²

6 A tank is $\frac{3}{5}$ full of water. $\frac{1}{4}$ of this water is used. What fraction of the whole tank is used?

Answer: $\frac{3}{20}$

7 Sam says "When you multiply two numbers, the answer is always bigger than both of them." Show that Sam is wrong by giving an example.

Answer: For example $\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$, which is smaller than both.

- 8** A triangle has base $1\frac{1}{2}$ cm and height $2\frac{2}{3}$ cm. Work out its area. (Area of a triangle = $\frac{1}{2} \times \text{base} \times \text{height}$.)

Answer: 2 cm²

- 9 Challenge.** Find the missing fraction: $\frac{2}{3} \times ? = \frac{1}{6}$

Answer: $\frac{1}{4}$ (because $\frac{1}{6} \div \frac{2}{3} = \frac{1}{4}$)