

GCSE Maths: Dividing fractions (Foundation): answers

GCSE Maths - Fractions - Foundation - Lesson 3.7

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/dividing-fractions/

Exercise 3G Dividing fractions Non-calculator

1 Write down the reciprocal of each number.

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

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

(b) $\frac{5}{8}$

Answer: $\frac{8}{5}$

(c) 4

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

(d) $\frac{1}{7}$

Answer: 7

(e) $3\frac{1}{2}$

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

2 Work out how many times the second number goes into the first.

(a) $2 \div \frac{1}{2}$

Answer: 4

(b) $3 \div \frac{1}{4}$

Answer: 12

(c) $5 \div \frac{1}{3}$

Answer: 15

(d) $4 \div \frac{2}{3}$

Answer: 6

(e) $6 \div \frac{3}{4}$

Answer: 8

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

(a) $\frac{1}{2} \div \frac{1}{4}$

Answer: 2

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

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

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

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

(d) $\frac{2}{5} \div \frac{3}{4}$

Answer: $\frac{8}{15}$

(e) $\frac{7}{8} \div \frac{1}{4}$

Answer: $3\frac{1}{2}$

(f) $\frac{4}{9} \div \frac{2}{3}$

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

4 Work out.

(a) $\frac{3}{4} \div 3$

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

(b) $\frac{4}{5} \div 2$

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

(c) $\frac{6}{7} \div 4$

Answer: $\frac{3}{14}$

(d) $\frac{5}{6} \div 10$

Answer: $\frac{1}{12}$

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

(a) $2\frac{1}{2} \div 1\frac{1}{4}$

Answer: 2

(b) $3\frac{1}{3} \div \frac{2}{3}$

Answer: 5

(c) $1\frac{3}{4} \div 2\frac{1}{3}$

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

(d) $4\frac{1}{2} \div 1\frac{1}{8}$

Answer: 4

- 6 A ribbon is $4\frac{1}{2}$ m long. It is cut into pieces that are $\frac{3}{4}$ m long. How many pieces can be cut?

Answer: 6 pieces

- 7 $\frac{3}{5}$ of a pizza is shared equally between 3 people. What fraction of the whole pizza does each person get?

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

- 8 Is $\frac{1}{2} \div \frac{1}{4}$ the same as $\frac{1}{4} \div \frac{1}{2}$? Show your working.

Answer: No. $\frac{1}{2} \div \frac{1}{4} = 2$ but $\frac{1}{4} \div \frac{1}{2} = \frac{1}{2}$.

- 9 Work out $\frac{2}{3} \times \frac{3}{4} \div \frac{1}{2}$.

Answer: 1

- 10 **Challenge.** The area of a rectangle is $\frac{3}{4}$ m² and its length is $\frac{5}{6}$ m. Work out its width.

Answer: $\frac{9}{10}$ m