

GCSE Maths Fractions (Foundation): check-up and exam-style questions: answers

GCSE Maths - Fractions - Foundation - Test yourself

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/check-up-and-exam-style-questions/

Exercise 3J Check-up (non-calculator) Non-calculator

- 1 Write $\frac{12}{18}$ in its simplest form.

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

- 2 Work out $\frac{3}{4} + \frac{2}{3}$.

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

- 3 Work out $\frac{7}{8} - \frac{1}{4}$.

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

- 4 Work out $\frac{2}{5} \times \frac{3}{4}$.

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

- 5 Work out $\frac{5}{6} \div \frac{5}{12}$.

Answer: 2

- 6 Write $\frac{23}{6}$ as a mixed number.

Answer: $3 \frac{5}{6}$

- 7 Work out $\frac{5}{9}$ of 72.

Answer: 40

- 8 Which is bigger, $\frac{5}{8}$ or $\frac{7}{12}$?

Answer: $\frac{5}{8}$ ($\frac{15}{24} > \frac{14}{24}$)

- 9 Work out $2 \frac{1}{2} + 1 \frac{2}{3}$.

Answer: $4 \frac{1}{6}$

- 10 Write 0.45 as a fraction in its simplest form.

Answer: $\frac{9}{20}$

Exercise 3K Exam-style questions Non-calculator

- 1 Here is a shape divided into 10 equal parts. Shade $\frac{3}{5}$ of the shape. [2 marks]



Answer: Shade 6 of the 10 parts

- 2 Write $\frac{18}{24}$ in its simplest form. [2 marks]

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

- 3 Work out $\frac{2}{3} + \frac{1}{4}$. [2 marks]

Answer: $\frac{11}{12}$

- 4 Work out $\frac{3}{5}$ of 40. [2 marks]

Answer: 24

- 5 Work out $\frac{5}{6} - \frac{3}{4}$. [2 marks]

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

- 6 Write these fractions in order of size, smallest first. [3 marks]
 $\frac{3}{5}$ $\frac{5}{8}$ $\frac{7}{12}$

Answer: $\frac{7}{12}$, $\frac{3}{5}$, $\frac{5}{8}$ (using 120: 70, 72, 75)

- 7 Work out $2\frac{1}{4} \div \frac{3}{4}$. [3 marks]

Answer: 3

- 8 Work out $\frac{3}{8} \times \frac{4}{9}$. Give your answer in its simplest form. [2 marks]

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

- 9 Dev says " $\frac{2}{3} + \frac{1}{5} = \frac{3}{8}$ ". Is Dev correct? You must show your working. [3 marks]

Answer: No. $\frac{2}{3} + \frac{1}{5} = \frac{10}{15} + \frac{3}{15} = \frac{13}{15}$. Dev added the numerators and the denominators.

- 10 Mary has £48. She spends $\frac{3}{8}$ of her money on a book. She spends $\frac{1}{3}$ of the money that is left on lunch. How much money does Mary have left? [4 marks]

Answer: Book: £18, left £30. Lunch: £10, left £20.

- 11** In a club, $\frac{2}{5}$ of the members are boys. There are 18 boys. How many members are in the club altogether?

Answer: 2 parts = 18, 1 part = 9, 5 parts = 45 [3 marks]

- 12** A recipe uses $\frac{3}{4}$ of a cup of sugar to make 6 biscuits. How much sugar is needed for 20 biscuits? [3 marks]

Answer: $\frac{3}{4} \div 6 = \frac{1}{8}$ per biscuit; $\times 20 = 2\frac{1}{2}$ cups

- 13** Ali uses $\frac{2}{5}$ of a tank of fuel in week 1 and $\frac{1}{4}$ of the tank in week 2. What fraction of the tank is left?

Answer: $\frac{2}{5} + \frac{1}{4} = \frac{13}{20}$, so $\frac{7}{20}$ left [3 marks]

- 14** Write each as asked. [3 marks]

- (a) 0.35 as a fraction in its simplest form

Answer: $\frac{7}{20}$

- (b) $\frac{3}{8}$ as a decimal

Answer: 0.375

- 15** The area of a rectangle is $\frac{3}{4}$ m². Its length is $\frac{5}{6}$ m. Work out its width. Give your answer as a fraction.

Answer: $\frac{9}{10}$ m [3 marks]