

Fractions Decimals Percentages

GCSE Maths · Written to the shared content for AQA, Edexcel and OCR

Name _____ Class _____ Date _____

1. Worked example

Work out $\frac{2}{3} + \frac{3}{4}$. Give your answer mixed number.

Step 1 · LCM of 3 and 4

12

Step 2 · Convert both

$$\frac{2}{3} = \frac{8}{12}, \frac{3}{4} = \frac{9}{12}$$

Step 3 · Add, then convert

$$\frac{17}{12} = 1 \frac{5}{12}$$

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

Check: $0.667 + 0.75 = 1.417 \approx 1 \frac{5}{12} \checkmark$

2. Now try one with the steps

Work out $2\frac{1}{3} \times 1\frac{3}{4}$. Give your answer mixed number.

Step 1 · Improper fractions

Step 2 · Multiply

Step 3 · Convert

Answer:

3. Practice

Show your working. The marks tell you how much is expected.

1. Write 0.36 fraction in its simplest form. [2]

2. Write $\frac{3}{8}$ decimal. [1]

3. Write $\frac{7}{20}$ percentage. [1]

4. Work out $5/6 - 1/4$. [2]

5. Work out $3/4 \div 2/5$. Give your answer improper fraction. [2]

6. Work out $2\frac{1}{3} \times 1\frac{3}{4}$. Give your answer mixed number. [3]

7. Find $3/5$ of £45. [1]

8. Work out $1\frac{2}{3} + 2\frac{3}{4}$. Give your answer mixed number. [3]

9. Work out $4\frac{1}{2} - 2\frac{2}{3}$. Give your answer mixed number. [3]

10. Write 0.64, $5/8$, 63% and $2/3$ in order, smallest first. [2]

11. Which of $7/40$, $5/12$ and $3/16$ can be written decimals? Explain. [2]

12. Write $5/12$ recurring decimal. [2]

13. A cake needs $2\frac{1}{4}$ cups of flour. How much flour is needed for 3 cakes? Give your answer mixed number. [2]

14. Which is larger, $\frac{4}{7}$ or 0.57? Show how you decide. [2]

15. Work out $(\frac{2}{3} + \frac{1}{4}) \div 1\frac{1}{6}$. Give your answer fraction in its simplest form. [4]

4. Before you hand it in

$\frac{1}{2} + \frac{1}{3} = \frac{2}{5}$

Find a common denominator: $\frac{3}{6} + \frac{2}{6} = \frac{5}{6}$. Never add the bottom numbers.

$2\frac{1}{3} \times 1\frac{3}{4} = 2 \times 1 + \frac{1}{3} \times \frac{3}{4} = 2\frac{1}{4}$

Convert to improper fractions first: $\frac{7}{3} \times \frac{7}{4} = \frac{49}{12} = 4\frac{1}{12}$.

$\frac{3}{4} \div \frac{2}{5} = \frac{6}{20}$

Dividing by a fraction means multiplying by its reciprocal: $\frac{3}{4} \times \frac{5}{2} = \frac{15}{8}$.

$0.7 < 0.68$ because $7 < 68$

Write them to the same number of places: $0.70 > 0.68$.