

## Clumsy Clive On Fractions - Answers

Clive is tackling his fractions homework and knows that he's made mistakes somewhere.

Can you spot and correct the mistakes Clive has made?

Can you explain what mistakes Clive has made, and maybe give him some tips so that he (hopefully) doesn't make them again?

### Question 1:

Calculate  $\frac{8}{9} - \frac{2}{3}$  giving your answer in its simplest form.

*Clive's answer:*

$$\frac{8}{9} - \frac{2}{3} = \frac{6}{6}$$

Answer:

1

*Your answer:*

Find a common denominator:

$$\frac{8}{9} - \frac{6}{9}$$

Answer:

$\frac{2}{9}$

*What mistake has Clive made?*

Clive has just subtracted the numerators and denominators instead of finding a common denominator etc.

### Question 2:

Find  $\frac{3}{8}$  of £42.

*Clive's answer:*

Divide by the denominator:

$$£42 \div 8 = £5.25$$

Add the numerator.

Answer:

£8.25

*Your answer:*

Divide by the denominator:

$$£42 \div 8 = £5.25$$

Multiply by the numerator.

Answer:

£15.75

*What mistake has Clive made?*

Clive has added the numerator instead of multiplying by it.

**Question 3:**

Calculate  $\frac{3}{8} + \frac{1}{4}$  giving your answer in its simplest form.

*Clive's answer:*

Find a common denominator:

$$\frac{12}{32} + \frac{8}{32}$$

Answer:  $\frac{20}{32}$

*Your answer:*

Find a common denominator:

$$\frac{3}{8} + \frac{2}{8}$$

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

*What mistake has Clive made?*

Clive has not simplified his answer.

**Question 4:**

Calculate  $\frac{15}{32} \div 1\frac{1}{4}$  giving your answer in its simplest form.

*Clive's answer:*

Divide numerators.  
Divide denominators.

Answer:

$$\frac{15}{8} = 1\frac{7}{8}$$

*Your answer:*

Multiply by the reciprocal of  $\frac{5}{4}$ :

$$\frac{15}{32} \times \frac{4}{5}$$

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

*What mistake has Clive made?*

Clive has got this completely wrong – he needs to multiply having turned  $1\frac{1}{4}$  into an improper fraction.

**Question 5:**

Calculate  $2\frac{2}{3} \times 3\frac{1}{4}$  giving your answer as a mixed number in its simplest form.

*Clive's answer:*

Multiply the whole numbers:

$$2 \times 3 = 6$$

Multiply the fractions:

$$\frac{2}{3} \times \frac{1}{4} = \frac{2}{12}$$

Answer:

$$6\frac{1}{6}$$

*Your answer:*

Turn into improper fractions:

$$\frac{8}{3} \times \frac{13}{4}$$

Multiply:

$$\frac{104}{12}$$

Answer:  $\frac{26}{3} = 8\frac{2}{3}$

*What mistake has Clive made?*

Clive must convert to improper fractions before multiplying.