Dividing decimals

ANSWERS

1

Work out 8.52 ÷ 3 using short division.

Put the point in the answer straight above the point inside.

$$3 \overline{)\, 8.^{2}5^{1}2} \quad = \quad 2.84$$

Answer 2.84

Check 2.84 × 3 = 8.52

2

Work out 9.15 ÷ 5 using short division.

Put the point in the answer straight above the point inside.

$$5 \overline{)\, 9.^{4}1^{1}5} \quad = \quad 1.83$$

Answer 1.83

Check 1.83 × 5 = 9.15

3

Work out 5.4 ÷ 4 using short division.

Write zeros on the end while there is some left over.

$$4 \overline{)\, 5.^{1}4^{2}0} \quad = \quad 1.35$$

Answer 1.35

Check 1.35 × 4 = 5.4

4

Work out 7.3 ÷ 2 using short division.

Write zeros on the end while there is some left over.

$$2 \overline{)\, 7.^{1}3^{1}0} \quad = \quad 3.65$$

Answer 3.65

Check 3.65 × 2 = 7.3

5

Work out 7.2 ÷ 0.8

Multiply both numbers by 10, so you divide by a whole number.

$$\frac{7.2}{0.8} \overset{\times 10}{=} \frac{72}{8} = 9$$

Answer 9

Check 9 × 0.8 = 7.2

6

Work out 2.85 ÷ 0.05

Multiply both numbers by 10 or 100, until you divide by a whole number.

$$\frac{2.85}{0.05} \overset{\times 100}{=} \frac{285}{5} = 57$$

Answer 57

Check 57 × 0.05 = 2.85

7

Jaya works out 2.4 ÷ 0.3.
She writes 2.4 ÷ 3 = 0.8. Use a check to show that Jaya is wrong.
Then work out the right answer.

0.8 × 0.3 = 0.24, not 2.4

she only multiplied 0.3 by 10

24 ÷ 3 = 8

Answer 8

8

Mo, Ana and Leo share the cost of a board game equally.
The game costs £14.85.
How much does each of them pay?

14.85 ÷ 3, point straight up

14 ÷ 3 = 4 r 2, 28 ÷ 3 = 9 r 1

15 ÷ 3 = 5

Answer £4.95

Dividing decimals *further practice*

ANSWERS

9

Work out 6.24 ÷ 4

6 ÷ 4 = 1 r 2, 22 ÷ 4 = 5 r 2

24 ÷ 4 = 6

Answer 1.56

10

Work out 9.1 ÷ 4

9.1 = 9.100

9 ÷ 4 = 2 r 1, 11 ÷ 4 = 2 r 3

30 ÷ 4 = 7 r 2, 20 ÷ 4 = 5

Answer 2.275

11

A jug holds 1.8 litres of smoothie.
Each glass holds 0.3 litres.
How many glasses can be filled from the jug?

1.8 ÷ 0.3

× 10: 18 ÷ 3

Answer 6 glasses

12

Mia multiplies a number by 6.
Her answer is 8.4. What number did she start with?

8.4 ÷ 6

8 ÷ 6 = 1 r 2, 24 ÷ 6 = 4

check 1.4 × 6 = 8.4

Answer 1.4

13

A pack of 4 pens costs £3.60. A pack of 6 pens costs £5.10. Which pack is better value? Show how you know.

£3.60 ÷ 4 = £0.90 a pen

£5.10 ÷ 6 = £0.85 a pen

Answer the pack of 6

14

Fabric costs £0.80 for each metre.
Jo spends £6.40 on fabric.
How many metres does she buy?

6.4 ÷ 0.8

× 10: 64 ÷ 8

Answer 8 metres

15

5 cinema tickets cost £42.50 altogether.
How much do 3 of these tickets cost?

£42.50 ÷ 5 = £8.50

£8.50 × 3

Answer £25.50

16

Nia says that dividing always makes a number smaller. Use 2.4 ÷ 0.6 to show that Nia is wrong.

2.4 ÷ 0.6 = 24 ÷ 6 = 4

4 is bigger than 2.4

Answer No, 2.4 ÷ 0.6 = 4