Interleaved: decimal places and significant figures

ANSWERS

1

Round 0.004072 to 2 significant figures.

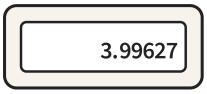
Which method? Decimal places | Significant figures | Nearest 10, 100 or 1000

the 4 is the first significant figure: 0.0040|72, the 7 rounds up

Answer 0.0041

2

Round the number on this calculator display to 2 decimal places.



Which method? Decimal places | Significant figures | Nearest 10, 100 or 1000

Answer 4.00

3

A town has a population of 72,450.
Round this to the nearest hundred.

Which method? Decimal places | Significant figures | Nearest 10, 100 or 1000

Answer 72,500

4

Round 48,620 to 2 significant figures.

Which method? Decimal places | Significant figures | Nearest 10, 100 or 1000

Answer 49,000

5

By road, London is 312.4 km from Leeds.
Write this distance to the nearest 10 km.

Which method? Decimal places | Significant figures | Nearest 10, 100 or 1000

Answer 310 km

6

Three friends share a bill of £50 equally.
How much does each one pay, to the nearest penny?

Which method? Decimal places | Significant figures | Nearest 10, 100 or 1000

50 ÷ 3 = 16.666..., nearest penny: 2 decimal places

Answer £16.67

7

Estimate 6.82 × 38.9 by rounding each number to 1 significant figure.

Which method? Decimal places | Significant figures | Nearest 10, 100 or 1000

7 × 40

Answer 280

8

A plank of wood is 2.4836 m long.
Write its length to the nearest centimetre.

Which method? Decimal places | Significant figures | Nearest 10, 100 or 1000

1 cm = 0.01 m: 2 decimal places

Answer 2.48 m

Interleaved: decimal places and significant figures *further practice*

ANSWERS

9

Round 7.0649 to 2 decimal places.

Answer 7.06

10

Round 0.0599 to 2 significant figures.

0.059|9 rounds up to 0.060: the last zero shows the 2 significant figures

Answer 0.060

11

A bag of flour has a mass of 1.4673 kg.
Write its mass to the nearest gram.

1 g = 0.001 kg: 3 decimal places

Answer 1.467 kg

12

A stadium holds 60,483 people.
Write this to the nearest thousand.

Answer 60,000

13

The population of a country is 6,849,512.
Write this to 3 significant figures.

684|9512: the 9 rounds 684 up to 685

Answer 6,850,000

14

A charity raised £9,960. Write this to the nearest £100.

between £9,900 and £10,000, nearer £10,000

Answer £10,000

15

Estimate 41.7 × 5.92 ÷ 0.48 by rounding each number to 1 significant figure.

40 × 6 ÷ 0.5 = 240 ÷ 0.5

Answer 480

16

Leah says that 5.997 rounded to 2 decimal places is 6. Explain her mistake and give the correct answer.

6 shows no decimal places; to 2 decimal places it must show two

Answer 6.00