Rounding to significant figures

ANSWERS

1

Round 6283 to 2 significant figures.

Th	H	T	O
6	2	8	3
6	3	0	0

Answer: 6300

2

Round 0.00572 to 2 significant figures.

O	t	h	th	tth	htth
0.	0	0	5	7	2
0.	0	0	5	7	

Answer: 0.0057

3

Round 38 415 to 3 significant figures.

TTh	Th	H	T	O
3	8	4	1	5
3	8	4	0	0

Answer: 38 400

4

Round 4.073 to 3 significant figures.

O	t	h	th
4.	0	7	3
4.	0	7	

Answer: 4.07

5

Round 0.08164 to 2 significant figures.

O	t	h	th	tth	htth
0.	0	8	1	6	4
0.	0	8	2		

Answer: 0.082

6

Round 52 690 to 1 significant figure.

TTh	Th	H	T	O
5	2	6	9	0
5	0	0	0	0

Answer: 50 000

7

Jas rounds 0.0471 to 2 significant figures and writes 0.05. Explain the mistake. Then write the right answer.

the zero at the front does not count that is 2 decimal places

Answer: 0.047

8

Ben says 60 380 rounded to 2 significant figures is 60. Is Ben right? Explain how you know.

60 is far too small fill the zeros up to the point

Answer: No, it is 60 000

Rounding to significant figures *further practice*

ANSWERS

9

Round 0.3049 to 3 significant figures.

first significant figure: 3

3, 0, 4 then 9 decides: round up

Answer *0.305*

10

Round 27 846 to
a) 1 significant figure
b) 2 significant figures
c) 3 significant figures

a) *30 000*

b) *28 000*

c) *27 800*

11

A theme park had 18 726 visitors on Saturday. Write this number to 2 significant figures.

1, 8 then 7 decides: round up

fill the zeros

Answer *19 000 visitors*

12

A hair is 0.0718 mm thick. Round this to 1 significant figure.

the zeros at the front do not count

ring the 7, then the 1 decides

Answer *0.07 mm*

13

Which of these numbers are 4000 when rounded to 1 significant figure?

3512 4490 4506 3449

3512 → 4000, 4490 → 4000

4506 → 5000, 3449 → 3000

Answer *3512 and 4490*

14

A number rounded to 2 significant figures is 0.63. Write down a number it could have been.

anything from 0.625

up to but not including 0.635

Answer *for example 0.628*

15

A rectangle is 12.46 cm long and 8.37 cm wide. Work out its perimeter. Give your answer to 3 significant figures.

12.46 + 8.37 + 12.46 + 8.37

= 41.66

Answer *41.7 cm*

16

Lena rounds 0.0408 to 2 significant figures and gets 0.041. Kai gets 0.04. Who is right? Explain how you know.

4 is first, and the 0 after it counts

8 decides, so round up

Answer *Lena*