

GCSE Maths: Rounding and truncation (Foundation): worksheet

GCSE Maths - Decimals, Rounding and Estimation - Foundation - Lesson 4.6

Name: _____

Date: _____

Score: _____

25 questions. Write your answers in the spaces. Answers and step-by-step help are free at websink.site/gcse/maths/ch04-decimals-rounding-estimation/foundation/rounding-and-truncation/

Exercise 4F Rounding to decimal places and place values

Non-calculator

1 Round each number to the nearest whole number.

(a) 3.6

Answer: _____

(b) 12.3

Answer: _____

(c) 7.5

Answer: _____

(d) 0.49

Answer: _____

(e) 19.5

Answer: _____

(f) 99.9

Answer: _____

2 Round each number to the nearest ten, hundred or thousand as shown.

(a) 346 to the nearest ten

Answer: _____

(b) 2549 to the nearest hundred

Answer: _____

(c) 15 to the nearest ten

Answer: _____

(d) 48 270 to the nearest thousand

Answer: _____

(e) 653 to the nearest hundred

Answer: _____

(f) 7500 to the nearest thousand

Answer: _____

3 Round each number to 1 decimal place.

(a) 4.36

Answer: _____

(b) 0.847

Answer:

(c) 12.05

Answer:

(d) 9.96

Answer:

(e) 3.449

Answer:

(f) 0.052

Answer:

4 Round each number to 2 decimal places.

(a) 5.678

Answer:

(b) 0.0942

Answer:

(c) 12.999

Answer:

(d) 3.005

Answer:

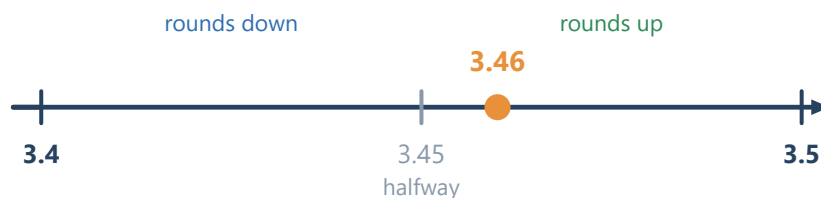
(e) 7.1349

Answer:

(f) 0.396

Answer:

5 Use the number line to round 3.46 to 1 decimal place. Is 3.46 nearer to 3.4 or 3.5?



Answer:

6 Which of these numbers are equal to 3.4 when rounded to 1 decimal place? 3.35, 3.449, 3.45, 3.39, 3.351, 3.5

Answer:

7 The price of an item is £17.865. Round this to the nearest penny.

Answer:

8 Dev rounds 5.449 to 1 decimal place. He says: "5.449 rounds to 5.45, and 5.45 rounds to 5.5." Is he correct? Explain.

Answer:

- 9** A plank has length 2.4638 m. Write its length to the nearest centimetre.

Answer:

- 10** Write down the smallest number with 2 decimal places that rounds to 5.7 when rounded to 1 decimal place. Then write down the largest such number.

(a) smallest

Answer:

(b) largest

Answer:

- 11** Round 9.996 to 2 decimal places and explain why the answer has a zero in the units column.

Answer:

- 12** The number x is 3.5 when rounded to 1 decimal place, and 4 when rounded to the nearest whole number. Write down a possible value of x with 2 decimal places.

Answer:

Exercise 4G Rounding to significant figures and truncation

Calculator allowed

- 1** Round each number to 1 significant figure.

(a) 48

Answer:

(b) 0.0762

Answer:

(c) 5921

Answer:

(d) 0.00349

Answer:

(e) 3.96

Answer:

(f) 95

Answer:

- 2** Round each number to 2 significant figures.

(a) 3.482

Answer:

(b) 0.05269

Answer:

(c) 7619

Answer:

(d) 12.96

Answer:

(e) 0.003051

Answer:

(f) 450.7

Answer:

3 Round each number to 3 significant figures.

(a) 4.5678

Answer:

(b) 0.0123456

Answer:

(c) 56789

Answer:

(d) 2.998

Answer:

(e) 0.80049

Answer:

(f) 1234.5

Answer:

4 Round each number to 1 significant figure.

(a) 27

Answer:

(b) 3.4

Answer:

(c) 0.62

Answer:

(d) 180

Answer:

5 Truncate each number as shown.

(a) 4.78 to 1 decimal place

Answer:

(b) 12.999 to 2 decimal places

Answer:

(c) 0.0567 to 2 significant figures

Answer:

(d) 4567 to 2 significant figures

Answer:

(e) 9.99 to 1 decimal place

Answer:

(f) 0.8 to the nearest whole number

Answer: _____

6 Write the number 8.746:

(a) rounded to 2 decimal places

Answer: _____

(b) truncated to 2 decimal places

Answer: _____

7 Use your calculator to work out $17.8 \div 7$. Give your answer correct to 3 significant figures.

Answer: _____

8 £100 is shared equally between 7 people. How much does each person get, to the nearest penny?

Answer: _____

9 A bottle holds 1.5 litres. It is shared equally between 7 glasses. How much is in each glass? Give your answer in litres to 2 significant figures.

Answer: _____

10 The population of a town is 24 683. Write this number (a) to the nearest thousand, (b) to 2 significant figures.

(a) to the nearest thousand

Answer: _____

(b) to 2 significant figures

Answer: _____

11 The value of π is 3.14159265... Write π correct to the accuracy shown.

(a) to 3 significant figures

Answer: _____

(b) to 2 decimal places

Answer: _____

(c) to 5 significant figures

Answer: _____

12 Explain why 0.0307 is 0.031 to 2 significant figures, not 0.03.

Answer: _____

13 Write down a number that is 0.1 when rounded to 1 significant figure and 0.11 when rounded to 2 significant figures.

Answer: _____