

1.10

Rounding

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18 (a) Use your calculator to work out the value of

$$\sqrt{\frac{8.9 + 2.345}{0.76 \times 2.9}}$$

Write down all the figures on your calculator display.

.....
(2)

(b) Give your answer to part (a) correct to 2 significant figures.

.....
(1)

June 2018 2F

1

(b) Write 46 821 correct to the nearest 100

.....
(1)

(c) Write 73.654 correct to 1 decimal place.

.....
(1)

Jan 2018 1FR

1

(ii) Write the number 76 385 correct to the nearest 1000

.....
(2)

Jan 2018 2FR

6

The Earth is 4.54 billion years old.

(e) Write the number 4.54 correct to one decimal place.

.....
(1)

10

- (c) (i) Find the value of 6.1^4
Write down all the figures on your calculator display.

.....

- (ii) Write your answer to part (c) (i) correct to 2 significant figures.

.....

(2)

1

(c) Write 73.654 correct to 1 decimal place.

.....
(1)

11 (a) Work out the value of $\frac{10.4}{5.1 - 2.7} + \frac{6.8 - 3.2}{9.5}$

Give your answer as a decimal.

Write down all the figures on your calculator display.

.....
(2)

(b) Give your answer to part (a) correct to 3 significant figures.

.....
(1)

6 (a) Write 1782 correct to the nearest hundred.

.....
(1)

11

(1)

(b) (i) Work out the value of $\frac{7.61^2}{5.2 \times 3.5}$

Write down all the figures on your calculator display.

.....
(2)

(ii) Write your answer to part (b)(i) correct to 2 significant figures.

.....
(1)

January 2019 1F

1

(e) Write the number 286 correct to the nearest 10

(1)

7
(d) (i) Work out the value of $\frac{\sqrt{8.4 + 9.1^2}}{4.1 \times 0.6}$

Write down all the figures on your calculator display.

(2)

(ii) Write your answer to part (d) (i) correct to 1 decimal place.

(1)

20 The length of a line is 12.3 cm, correct to 1 decimal place.

(a) Write down the upper bound of the length of the line.

(1) cm

(b) Write down the lower bound of the length of the line.

(1) cm

12 (a) Use your calculator to work out the value of

$$\frac{24.3 - 16.8}{0.18} + \sqrt{67.4}$$

Write down all the figures on your calculator display.

.....
(2)

(b) Write your answer to part (a) correct to 1 significant figure.

.....
(1)

25

$$\text{pressure} = \frac{\text{force}}{\text{area}}$$

A box, in the shape of a cuboid, is going to be put on a table.

The whole of one face of the box will be in contact with the table.

The force exerted by the box on the table is always 105 newtons.

The box is 5 m by 4 m by 3 m.

The greatest pressure exerted by the box on the table is P newtons/m²

The least pressure exerted by the box on the table is Q newtons/m²

Work out the value of $P - Q$

(Total for Question 25 is 3 marks)

- 6 (a) Work out the value of $\frac{9.24 \times 4.35}{6.57 + 2.19}$

Give your answer as a decimal.

Write down all the figures on your calculator display.

.....
(2)

- (b) Give your answer to part (a) correct to 2 significant figures.

.....
(1)

January 2020 2F

2

- (c) Write 0.46832 correct to 2 decimal places.

.....
(1)

January 2020 1FR

- 9 (a) Write 24.8635 correct to 3 significant figures.

.....
(1)

19 The weight of a cat is 4.3 kg correct to 2 significant figures.

(a) Write down the upper bound of the weight of the cat.

..... kg
(1)

(b) Write down the lower bound of the weight of the cat.

..... kg
(1)

1

Thailand produced 248 200 barrels of crude oil.

(c) Write 248 200 correct to the nearest thousand.

.....
(1)

10 (a) Use your calculator to work out the value of $\frac{67.8 + 4.6^2}{\sqrt{56}}$

Write down all the figures on your calculator display.

.....
(2)

(b) Give your answer to part (a) correct to 2 significant figures.

.....
(1)

5

(b) Write 5.8394 correct to 2 decimal places.

.....
(1)

11 (a) Use your calculator to work out the value of $\frac{2.14^3 - 3.76}{\sqrt{1.24}}$

Write down all the figures on your calculator display.

.....
(2)

(b) Write your answer to part (a) correct to 2 significant figures.

.....
(1)

2

(c) Write the number 3.4896 correct to 2 decimal places.

.....
(1)

- 11 (a) Use your calculator to work out the value of

$$\frac{7.45}{4.3^2 - 2.9}$$

Give your answer as a decimal.

Write down all the figures on your calculator display.

.....
(2)

- (b) Write your answer to part (a) correct to 3 decimal places.

.....
(1)

- 8 By writing each value correct to one significant figure, work out an estimate for the value of

$$\frac{8.23 \times 181}{0.482}$$

Show your working clearly.

.....

(Total for Question 8 is 3 marks)

3

(c) Write the number 5.68 correct to one decimal place.

.....
(1)

4

(d) Write 25.78621 correct to 2 decimal places.

.....
(1)

20 The weight of a cake is 2.75 kg, correct to 2 decimal places.

(a) Write down the lower bound of the weight of the cake.

..... kg
(1)

(b) Write down the upper bound of the weight of the cake.

..... kg
(1)

Penny has worked out $\frac{81.3 \times 59.2}{1.9^2}$ on her calculator.

Her answer is 13 332.299 17

Penny's answer is not sensible.

(c) By rounding each number to one significant figure, work out a suitable estimate to show that her answer is not sensible.
Show your working clearly.

(2)

11 (a) Work out the value of $\frac{2.5 + 3.6}{12.7} + \frac{8.2}{5 \times 3.6}$

Give your answer as a decimal.

Write down all the figures on your calculator display.

.....
(2)

(b) Write your answer to part (a) correct to 3 significant figures.

.....
(1)

14 (a) Work out the value of $\frac{9}{12.4} + \frac{5.3 \times 2.8}{9.64}$

Give your answer as a decimal.

Write down all the figures on your calculator display.

.....
(2)

(b) Write your answer to part (a) correct to 3 significant figures.

.....
(1)