

N26N27 Rounding to dp and sf

OCR

6 (a) Round 341.537

(i) to 2 decimal places,

(a)(i) **[1]**

(ii) to 1 significant figure.

(ii) **[1]**

6 (a) Round 341.537



(i) to 2 decimal places,

(a)(i) 341.54 [1]

(ii) to 1 significant figure.

341.537
↑

(ii) 300 [1]

10 (a) Put brackets into these calculations so that the answer is correct.

(i) $70 - 25 \div 9 \times 3 = 15$ [1]

(ii) $6 \times 8 - 5 + 14 = 32$ [1]

(b) Calculate.

$$\frac{46.3 + 89.4}{15 - 3.1^2}$$

Give your answer correct to 3 significant figures.

(b) [2]

10 (a) Put brackets into these calculations so that the answer is correct.

(i) $(70 - 25) \div 9 \times 3 = 15$ ✓ [1]

$45 \div 9 \times 3 = 15$ ✓

(ii) $6 \times (8 - 5) + 14 = 32$ [1]

$6 \times 3 + 14 = 32$ ✓

(b) Calculate.

$$\frac{46.3 + 89.4}{15 - 3.1^2}$$
 ✓

Give your answer correct to 3 significant figures.

25.17625

(b) 25.2 [2]

9 (a) Round 7.3065 to 2 decimal places.

(a) [1]

(b) Round each number to 3 significant figures.

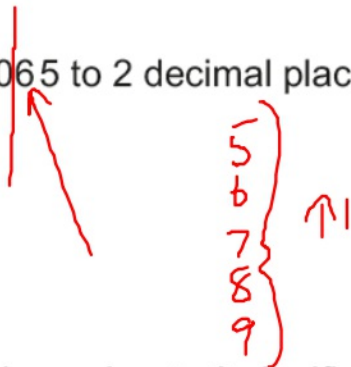
(i) 408231

(b)(i) [1]

(ii) 0.00613702

(ii) [1]

9 (a) Round 7.3065 to 2 decimal places.



(a) 7.31 [1]

(b) Round each number to 3 significant figures.

(i) 408231



(b)(i) 408000 [1]

(ii) 0.00613702

(ii) 0.00614 [1]

3 (a) Round 7874 to

(i) the nearest hundred,

(a)(i) [1]

(ii) 1 significant figure.

(ii) [1]

(b) Find the value of x .

$$3^5 \times 3^2 = 3^x$$

(b) $x =$ [1]

3 (a) Round 7874 to

(i) the nearest hundred,

(ii) 1 significant figure.

7874

(a)(i) 7900 [1]

(ii) 8000 [1]

(b) Find the value of x.

$$3^5 \times 3^2 = 3^x$$

(b) x = 7 [1]

(b) $\sqrt{12.25^3}$

Give your answer correct to 1 decimal place.

N50
N26

(b) [2]

(b) $\sqrt{12.25^3}$

Give your answer correct to 1 decimal place.

N50
N26

42.875

(b) 42.9 [2]

7 (a) Round 81.469 to 1 decimal place.

N26

(a) [1]

(b) Round 0.005 694 to 3 significant figures.

N27

(b) [1]

81.469

7 (a) Round 81.469 to 1 decimal place.

N26

(a) 81.5 [1]

(b) Round 0.005 694 to 3 significant figures.

N27

(b) 0.00569 [1]

0.005694

Edexcel

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23 $S = \pi^2(b^2 - a^2)$

$a = 8, b = 10$

Calculate the value of S .

Give your answer correct to 3 significant figures.

.....
(Total for Question 5 is 2 marks)

5

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$$S = \pi^2(b^2 - a^2)$$

$$a = 8, b = 10$$

Calculate the value of S .

Give your answer correct to 3 significant figures.

$$S = \pi^2(100 - 64)$$

$$S = \pi^2(36) = 355.30$$

$$S =$$

355 ✓

(Total for Question 5 is 2 marks)

15 (a) Work out $\frac{4.36 + 2.8^3}{6.8 - 5.42}$

Give your answer as a decimal.
Write down all the digits on your calculator display.

.....
(2)

(b) Give your answer to part (a) correct to 1 decimal place.

.....
(1)

(Total for Question 15 is 3 marks)

15 (a) Work out $\frac{4.36 + 2.8^3}{6.8 - 5.42}$

Give your answer as a decimal.
Write down all the digits on your calculator display.

19.06

(2)

(b) Give your answer to part (a) correct to 1 decimal place.

19.1

(1)

(Total for Question 15 is 3 marks)

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

N50

$$\sqrt{\frac{51.2 - 37.38}{9.67 + 84.9}}$$

Write down all the digits on your calculator display.

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

.....
(2)

N27

.....
(1)

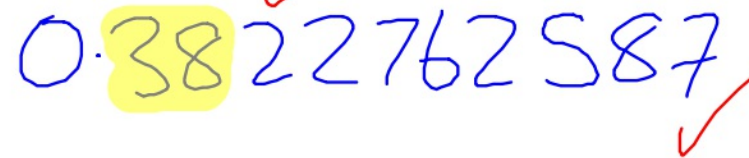
19 (a) Use your calculator to work out the value of

N50

$$\sqrt{\frac{51.2 - 37.38}{9.67 + 84.9}}$$

Write down all the digits on your calculator display.

0.3822762587 ✓



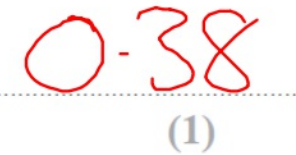
(b) Write your answer to part (a) correct to 2 significant figures.

(2)

N27

0.38

(1)

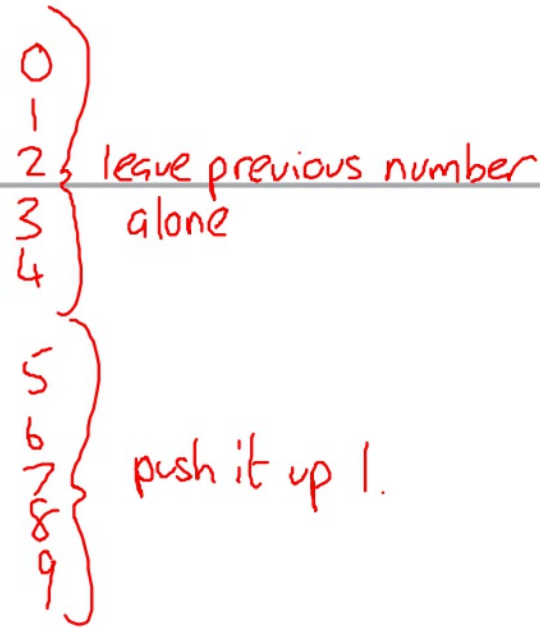
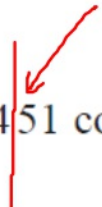


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2 Write 7.26451 correct to 3 decimal places.

.....
(Total for Question 2 is 1 mark)

2 Write 7.26451 correct to 3 decimal places.



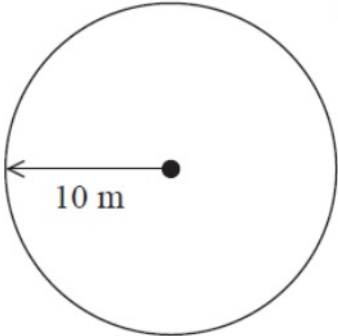
7.265

(Total for Question 2 is 1 mark)

18 Balena has a garden in the shape of a circle of radius 10 m.
He is going to cover the garden with grass seed to make a lawn.

Grass seed is sold in boxes.
Each box of grass seed will cover 46 m^2 of garden.

Balena wants to cover all the garden with grass seed.



(a) Work out an estimate for the number of boxes of grass seed Balena needs.
You must show your working.

.....
(4)

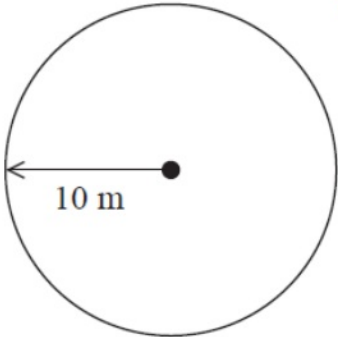
(b) Is your estimate for part (a) an underestimate or an overestimate?
Give a reason for your answer.

.....
.....

18 Balena has a garden in the shape of a circle of radius 10 m. He is going to cover the garden with grass seed to make a lawn.

Grass seed is sold in boxes. Each box of grass seed will cover 46 m² of garden.

Balena wants to cover all the garden with grass seed.



46m²
50m²

(a) Work out an estimate for the number of boxes of grass seed Balena needs. You must show your working.

Area of circle ... πr^2

3.142
≈ 3

3 × r²
3 × 10²
3 × 100 = 300m²

$300m^2 \div 50m^2 = 6 \text{ boxes}$

6 boxes
(4)

(b) Is your estimate for part (a) an underestimate or an overestimate? Give a reason for your answer.

lawn will be bigger ----- need more boxes ... underestimate.

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2 Write 56.78 correct to one significant figure.

.....
(Total for Question 2 is 1 mark)

2 Write 56.78 correct to one significant figure.

5
6
7
8
9

60 ✓

(Total for Question 2 is 1 mark)

Video created by W Neill

23 A number, n , is rounded to 2 decimal places.
The result is 4.76

Using inequalities, write down the error interval for n .

(Total for Question 23 is 2 marks)

2 Write 1.59 correct to 1 decimal place.

N26

.....
(Total for Question 2 is 1 mark)

23 A number, n , is rounded to 2 decimal places.
The result is 4.76

Using inequalities, write down the error interval for n .

4.76 \rightarrow 4.765
 \rightarrow 4.755

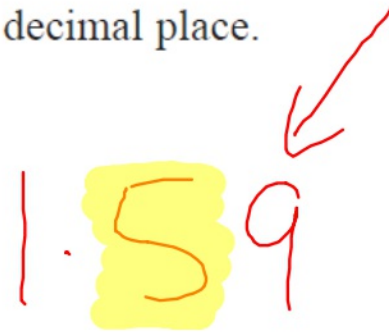
$$4.755 \leq n < 4.765$$

(Total for Question is 2 marks) ✓

2 Write 1.59 correct to 1 decimal place.

N26

1.59



1.6

(Total for Question 2 is 1 mark)

20 (a) Write 7357 correct to 3 significant figures.

N27

.....
(1)

20 (a) Write 7357 correct to 3 significant figures.

N27

7357
7360

7360
(1)

AQA

5 (a) Use your calculator to work out $\sqrt{701}$ as a decimal.

N50 Write down your full calculator display.

[1 mark]

Answer _____

5 (b) Give your answer to part (a) to 1 decimal place.

N26

[1 mark]

Answer _____

5 (a) Use your calculator to work out $\sqrt{701}$ as a decimal.

N50 Write down your full calculator display.

[1 mark]

Answer 26.47640459

26.476
|
↙

5 (b) Give your answer to part (a) to 1 decimal place.

N26

[1 mark]

Answer 26.5

11 (b) Convert 210 millilitres to fluid ounces.

R26
N26

Use 1 fluid ounce = 28.4 millilitres

Give your answer to 1 decimal place.

[2 marks]

Answer _____ fluid ounces

11 (b) Convert 210 millilitres to fluid ounces.

Use 1 fluid ounce = 28.4 millilitres

R26

N26

Give your answer to 1 decimal place.

[2 marks]

$$\begin{array}{r} \times 7.394 \\ \hline 210 \text{ ml} \\ \hline \underline{7.3943} \end{array} \quad \left(\begin{array}{l} 1 \text{ ounce} = 28.4 \text{ ml} \\ \times 7.3943 \end{array} \right)$$

Answer 7.4 fluid ounces