N50 Calculator Display Questions

OCR

8 **(a)** Calculate $\sqrt[3]{58^2+11}$.

(a) .....**[2]**

(b) Work out the number of seconds in a year.

(b) .....**[2]**

8 **(a)** Calculate $\sqrt[3]{58^2+11}$.

(a) 15 **[2]**

(b) Work out the number of seconds in a year.

min x hr x day x Year

60 x 60 x 24 x 365

(b) 31 536 000 **[2]**

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)** **(i)** By rounding each number correct to 1 significant figure, estimate the value of the following.
Show all your working.

$$\frac{12.3 + 7.92}{9.6 \times 0.625}$$

(a)(i) ..... **[2]**

(ii) Work out.

$$\frac{12.3 + 7.92}{9.6 \times 0.625}$$

Give your answer correct to 1 decimal place.

(ii) ..... **[2]**

9 **(a)** **(i)** By rounding each number correct to 1 significant figure, estimate the value of the following. Show all your working.

$$\frac{12.3 + 7.92}{9.6 \times 0.625}$$

$\frac{10 + 8}{10 \times 0.6} = \frac{18}{6} = 3$

(a)(i) 3 ..... **[2]**

(ii) Work out.

$$\frac{12.3 + 7.92}{9.6 \times 0.625}$$

Give your answer correct to 1 decimal place.

3.37

(ii) 3.4 ..... **[2]**

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3 Calculate.

NSO **(a)** $\dfrac{3.6}{1.2 - 0.3}$

(a) ..... **[1]**

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3 Calculate.

NSO **(a)** $\dfrac{3.6}{1.2 - 0.3}$

$\dfrac{3.6}{0.9} = 4$

(a) 4 ..... **[1]**

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

Give your answer correct to 1 decimal place.

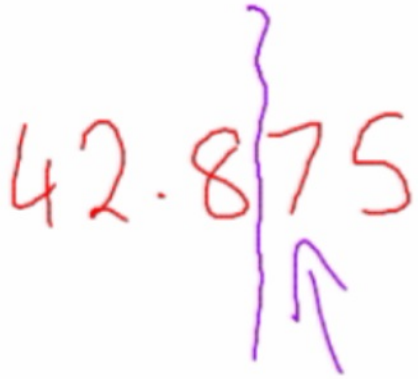
N50
N26

(b) ..... **[2]**

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

Give your answer correct to 1 decimal place.

N50
N26



(b) 42.9 ..... **[2]**

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1 Calculate.

(a) $\sqrt{\dfrac{4.8^2 + 3.6^2}{4}}$

(a) ..... **[2]**

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1 Calculate.

NSO

(a) $\sqrt{\dfrac{4.8^2 + 3.6^2}{4}}$

(a) 3 ..... **[2]**

Edexcel

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

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 $\dfrac{4.36 + 2.8^3}{6.8 - 5.42}$

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)

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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.

.....

(2)

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

N27

.....

(1)

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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.

0·38227625 87

.....

(2)

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

N27

0·38

.....

(1)

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12 Find the value of $\dfrac{\sqrt{13.4 - 1.5}}{(6.8 + 0.06)^2}$

Write down all the figures on your calculator display.

.....

(Total for Question 12 is 2 marks)

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12 Find the value of $\dfrac{\sqrt{13.4 - 1.5}}{(6.8 + 0.06)^2}$

Write down all the figures on your calculator display.

0·0733035904 81 ✓

(Total for Question 12 is 2 marks)

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8 (a) Find the value of $\sqrt{1.44 \times 3.61}$

NSO

.....

(1)

(b) Find the value of $(3.54 - 0.96)^2 - 4.096$

NSO

.....

(2)

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8 (a) Find the value of $\sqrt{1.44 \times 3.61}$

NSO

2.28

(1)

(b) Find the value of $(3.54 - 0.96)^2 - 4.096$

NSO

2.5604

(2)

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(b) Work out $\dfrac{\sqrt{17 + 4^2}}{7.3^2}$

N50

Write down all the figures on your calculator display.

.....

(2)

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(b) Work out $\dfrac{\sqrt{17 + 4^2}}{7.3^2}$

N50

Write down all the figures on your calculator display.

.....

(2)

7 (a) Find the reciprocal of 5

(b) Use your calculator to work out $\sqrt[3]{5\tan 60° + 1}$
Write down all the figures on your calculator display.

7 (a) Find the reciprocal of 5

$\frac{5}{1}$

$\frac{1}{5}$

(b) Use your calculator to work out $\sqrt[3]{5\tan 60° + 1}$
Write down all the figures on your calculator display.

2.129754359 ✓

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9 Find the value of $\dfrac{(6.67 \times 10^{-11}) \times (7.35 \times 10^{22})}{(1.74 \times 10^{6})^2}$

Give your answer correct to 1 decimal place.

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N50

.....

(Total for Question 9 is 2 marks)

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9 Find the value of $\dfrac{(6.67 \times 10^{-11}) \times (7.35 \times 10^{22})}{(1.74 \times 10^{6})^2}$

Give your answer correct to 1 decimal place.

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N50

1.6|9

1.6

(Total for Question 9 is 2 marks)

8 Use your calculator to work out $\sqrt{\dfrac{\sin 25° + \sin 40°}{\cos 25° - \cos 40°}}$

(a) Write down all the figures on your calculator display.

.....

(2)

(b) Write your answer to part (a) correct to 2 decimal places.

.....

(1)

(Total for Question 8 is 3 marks)

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Use your calculator to work out $\sqrt{\dfrac{\sin 25° + \sin 40°}{\cos 25° - \cos 40°}}$

(a) Write down all the figures on your calculator display.

2.756039957

(2)

(b) Write your answer to part (a) correct to 2 decimal places.

2.76

(1)

(Total for Question is 3 marks)

AQA

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

N5O Write down your full calculator display.

[1 mark]

Answer _____

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

N2b

[1 mark]

Answer _____

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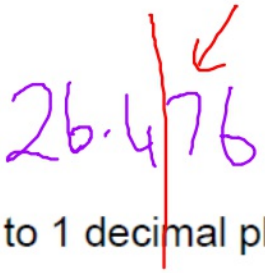
5 (a) Use your calculator to work out $\sqrt{701}$ as a decimal.

N50 Write down your full calculator display.

[1 mark]

Answer 26.476404459



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

N26

[1 mark]

Answer 26.5

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12 Work out $\sqrt{7.5^2 + 18^2}$

N50 Circle your answer.

[1 mark]

19.5 25.5 331.5 380.25

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12 Work out $\sqrt{7.5^2 + 18^2}$

N50 Circle your answer.

[1 mark]

19.5 25.5 331.5 380.25

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13 (a) Use your calculator to work out the exact value of $\frac{18\,953 \times 437}{11}$

[1 mark]

N50

Answer _____

13 (b) Use approximations to 1 significant figure to check if your answer to part (a) is sensible.

[3 marks]

N28

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13 (a) Use your calculator to work out the exact value of $\frac{18\,953 \times 437}{11}$

[1 mark]

N50

Answer 752,951

13 (b) Use approximations to 1 significant figure to check if your answer to part (a) is sensible.

[3 marks]

N28

$$\frac{20{,}000 \times 400}{10} = \frac{8000000}{10}$$

Yes, its not far away so sensible. 800,000

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5 Work out the value of $3^6 - \sqrt{841}$

[2 marks]

N50

Answer _____

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5 Work out the value of $3^6 - \sqrt{841}$

[2 marks]

N50

$3^6 = 729$ $729 - 29$

$\sqrt{841} = 29$

Answer 700

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14 (a) Use your calculator to work out $9.95^2 \times 29.8$

Give your answer as a decimal.

N50

Write down your full calculator display.

[1 mark]

Answer _____

14 (b) Is your answer to part (a) sensible?

Use approximations to decide.

N28

You **must** show your working.

[3 marks]

Tick a box.

☐ Sensible ☐ Not sensible

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14 (a) Use your calculator to work out $9.95^2 \times 29.8$

Give your answer as a decimal.

N50

Write down your full calculator display.

[1 mark]

Answer 2950.2745

14 (b) Is your answer to part (a) sensible?

Use approximations to decide. 1SF

N28

You **must** show your working.

[3 marks]

$10^2 \times 30$

$100 \times 30 = 3000$

Tick a box.

☑ Sensible ☐ Not sensible

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26 An approximation for the value of π is given by

N50

$$4\left(1-\frac{22}{57}+\frac{22}{85}-\frac{22}{105}+\frac{22}{117}-\frac{22}{242}\right)$$

Use your calculator to show that this approximation is within 0.1 of 3.14

[2 marks]

26 An approximation for the value of π is given by

N50

$$4\left(1-\frac{22}{57}+\frac{22}{85}-\frac{22}{105}+\frac{22}{117}-\frac{22}{242}\right)$$

Use your calculator to show that this approximation is within 0.1 of 3.14

[2 marks]

3.04183
+ 0.1
3.14183 which is more than 3.14
so yes, it is within 0.1 ✓