



Maths-it Podcast H-06

Higher GCSE Revision

Calculations, (mental, written and using a calculator)

Topics

Number problems without a calculator – Long multiplication and division
Using a calculator efficiently

Questions

1. (a) Work out the value of $(12 - 3) \times 4 - 6$



.....

(1)

(b) Add brackets () to make each statement correct.
You may use more than one pair of brackets in each statement.

(i) $\sqrt{16 - 7 \times 2 + 3} = 9$

(ii) $\sqrt{16 - 7 \times 2 + 3} = -31$

(iii) $\sqrt{16 - 7 \times 2 + 3} = 15$

(3)
(Total 3 marks)

2. Brian washes cars.



One day he washes 72 cars.
He charges £6.45 for each car wash.

(a) Work out the total amount he charges for 72 car washes.

£

(3)



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Julio works for Brian, he gets paid 95p per car washed.
One day he was paid £53.20 for washing cars.

- (b) How many cars did Julio wash?

..... cars

(3)

(Total 6 marks)

3. Calcs 'r' us sell calculators. Their prices are shown below for two different models.

fz205 - £2.90

gt7000 - £9.75



- (a) Mathchester High School place an order for 345 fz250 calculators and two gt7000 calculators. What is the total cost of this order?

£.....

(4)

- (b) Mathchester Grammar School have a budget of £160 to buy calculators. How many fz250 calculators could they buy?

.....

(3)

(Total 7 marks)



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4. Use your calculator to work out the value of $\frac{6.39 \times \tan 56^\circ}{\sin 80^\circ}$

Write down all the figures on your calculator display.

.....
(Total 2 marks)

5. (a) Use your calculator to work out $(9.3 - 0.709)^2 \times 0.97^4$

Write down all the figures on your calculator display.

.....
(2)

- (b) Put brackets in the expression below so that its value is 45.024

$$1.6 + 3.8 \times 2.4 \times 4.2$$

(1)
(Total 3 marks)

6. Use your calculator to work out the value of $\frac{36 - 19.8}{3.49 - 0.497}$

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

.....
(2)

- (b) Write your answer to part (a) to an appropriate degree of accuracy.

.....
(1)
(Total 3 marks)

7. Use your calculator to work out the value of $\frac{5 + \sqrt[3]{20}}{12 - 7.367} + 1.7^2$

Give your answer correct to 3 significant figures.

.....
(Total 3 marks)