

NAME

Time:



Calculator Questions

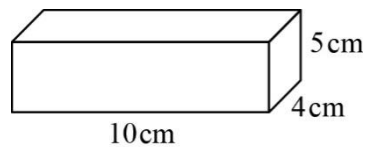


- 1 Change a speed of 45 km/h to a speed in m/s.

(3 marks)



- 3 The diagram shows a block of wood in the shape of a cuboid.



The density of the wood is 0.6 g/cm^3
Work out the mass of the block of wood.

(3 marks)



- 5 A box is put on a table.

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

The face of the box in contact with the table is rectangular, 2 m by 3 m.
The pressure on the table due to the box is 48 N/m^2
Work out the force exerted by the box on the table.

(3 marks)



7 A is directly proportional to c .

When $c = 10$, $A = 44$

a Find the value of A when $c = 40$

(2 marks)

b Find the value of c when $A = 110$

(2 marks)



9 A car depreciates in value by 20% each year.

a Write down the multiplier to find its value after 1 year.

(1 mark)

b Write down the multiplier that the original value can be multiplied by to find its value after 3 years.

Give your answer as a decimal.

(2 marks)



- 11 Boaz went on holiday by aeroplane. The flight time was 6 hours 24 minutes.
The average speed of the aeroplane was 620 kilometres per hour.
Work out the distance the aeroplane flew.

(3 marks)



- 13 A house increases in value by 10% in the first year after it is bought and by 12% in the second year after it is bought.
What multiplier will give the value of this house after 2 years?

(2 marks)



- 15 Myrtle invests £4000 at a rate of 1.9% compound interest per annum.
After how many years will the investment be worth more than £4400?
Show your working clearly.

(3 marks)



17 P is inversely proportional to the square of q .

When $q = 5$, $P = 3.4$

Find the value of P when $q = 2$

(3 marks)

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| Overall mark | / |
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