

Algebra: Quadratics, Rearranging Formulae and Identities

Calculator 10 minute test 3

Answer all questions.

1 Tick the statements below that are the same as the answer to $a^3 \times a^3$ [2 marks]

1 (a) $2a^3$

1 (b) a^9

1 (c) a^6

1 (d) $(a^3)^2$

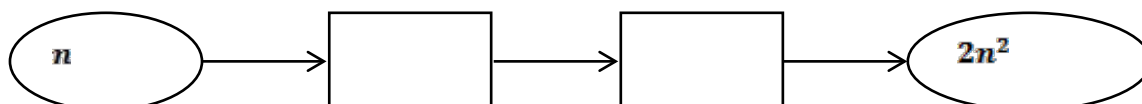
2 Factorise fully $4x^2 - 100x$ [2 marks]

Answer _____

3 Make c the subject of $a = b + \frac{c}{2}$ [2 marks]

Answer _____

4 Here is a number machine



Write an operation in each box to make the number machine work.

[2 marks]

5 These steps can be used to find the volume of a cylinder.

- Square the radius.
- Multiply by 3.14
- Multiply by the perpendicular height.

Use these steps to find the volume when the radius is 3.6 cm and the perpendicular height is 20cm. Give your answer to 3 significant figures.

[3 marks]

Answer _____ cm^3