GCSE FOUNDATION · REVISION MAT 1

Roots and powers

1 Work out

(a) 7^2 (b) 2^3

(c) $\sqrt{81}$ (d) $\sqrt[3]{64}$

2 (a) Write down a square number between 50 and 70.

(b) Write down a cube number between 100 and 150.

3 Ali says,

"$5^3 = 15$"

Explain why Ali is wrong.

4 Show that

$4^2 + 3^3 = 43$

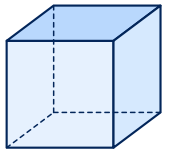
5 A square garden has an area of 144 m^2.



Fencing is put all the way round the edge. It costs £4.50 per metre.

Work out the total cost of the fencing.

6 A cube has a volume of 125 cm^3.



Work out the total surface area of the cube.

Mr&Mrs MATHS

1 (a) **49** (b) **8**

(c) **9** (d) **4**

2 (a) **64**

(b) **125**

3 Ali has multiplied 5 by 3.

$5^3 = 5 \times 5 \times 5 =$ **125**

ANSWERS · REVISION MAT 1

Roots and powers

4 $4^2 = 16$

$3^3 = 27$

$16 + 27 = 43$ ✓

5 Side = $\sqrt{144} = 12$ m

Perimeter = $4 \times 12 = 48$ m

Cost = $48 \times$ £4.50 = **£216.00**

6 Side = $\sqrt[3]{125} = 5$ cm

One face = 25 cm^2

Surface area = $6 \times 25 =$ **150 cm^2**

Mr&Mrs MATHS