GCSE FOUNDATION · REVISION MAT 2

Roots and powers

1 Work out

(a) 9^2 (b) 3^3

(c) $\sqrt{121}$ (d) $\sqrt[3]{27}$

2 (a) Write down a square number between 80 and 110.

(b) Write down a cube number between 50 and 100.

3 Beth says,

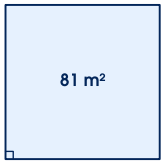
"$4^3 = 12$"

Explain why Beth is wrong.

4 Show that

$5^2 + 2^3 = 33$

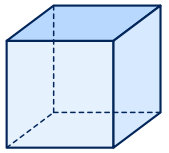
5 A square garden has an area of 81 m^2.



Fencing is put all the way round the edge. It costs £6.25 per metre.

Work out the total cost of the fencing.

6 A cube has a volume of 64 cm^3.



Work out the total surface area of the cube.

Mr&Mrs MATHS

1 (a) **81** (b) **27**

(c) **11** (d) **3**

2 (a) **81 or 100**

(b) **64**

3 Beth has multiplied 4 by 3.

$4^3 = 4 \times 4 \times 4 =$ **64**

ANSWERS · REVISION MAT 2

Roots and powers

4 $5^2 = 25$

$2^3 = 8$

$25 + 8 = 33$ ✓

5 Side = $\sqrt{81} = 9$ m

Perimeter = $4 \times 9 = 36$ m

Cost = $36 \times$ £6.25 = **£225.00**

6 Side = $\sqrt[3]{64} = 4$ cm

One face = 16 cm^2

Surface area = $6 \times 16 =$ **96 cm^2**

Mr&Mrs MATHS