GCSE HIGHER · REVISION MAT 4

Powers and roots

1 Work out

2^6

2 Work out

$\sqrt{0.25}$

3 Amy says $3^2 \times 2^2 = 6^2$.

Is she correct? Show working.

4 A square patio has area 56.25 m².

Fencing costs £12 per metre.

Find the cost of fencing all the way round.

5 Show that

$1^3 + 2^3 + 3^3 = (1 + 2 + 3)^2$

6 Find x.

$x^3 = 0.125$

7 Show that $\sqrt{2} \times \sqrt{18}$ is a whole number.

8 A cube has a surface area of 150 cm².

Find its volume.

Mr&Mrs MATHS

ANSWERS · REVISION MAT 4

Powers and roots

1 **64**

2 **0.5**

3 $9 \times 4 = 36$

Yes, $6^2 = 36$

4 Side $\sqrt{56.25} = 7.5$ m

Perimeter 30 m

£360

5 $1 + 8 + 27 = 36$

$6^2 = 36$

6 $0.5^3 = 0.125$

$x = 0.5$

7 $\sqrt{36}$

$= 6$

8 One face: 25 cm²

Side 5 cm

125 cm³

Mr&Mrs MATHS