

Square and Cube Numbers

Square Numbers

When you multiply a number by itself, you get a square number.
Here are the first few square numbers:

1 4 9 16 25 36 49 64 81 100 121 144...

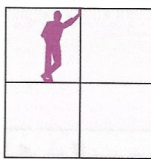
(1×1) (2×2) (3×3) (4×4) (5×5) (6×6) (7×7) (8×8) (9×9) (10×10) (11×11) (12×12)...

They're called square numbers because they are the areas in this pattern of squares.

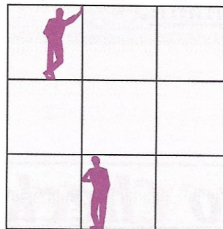
$$1 \times 1 = 1$$



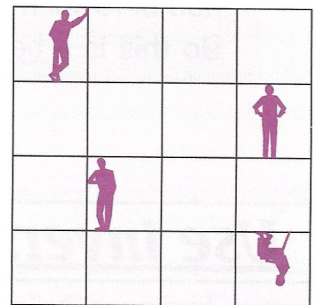
$$2 \times 2 = 4$$



$$3 \times 3 = 9$$



$$4 \times 4 = 16$$



There's a quick way to write them.
You write five squared as 5^2 .

EXAMPLES:

- a) $7^2 = 7 \text{ squared} = 7 \times 7 = 49$.
b) $15^2 = 15 \text{ squared} = 15 \times 15 = 225$.

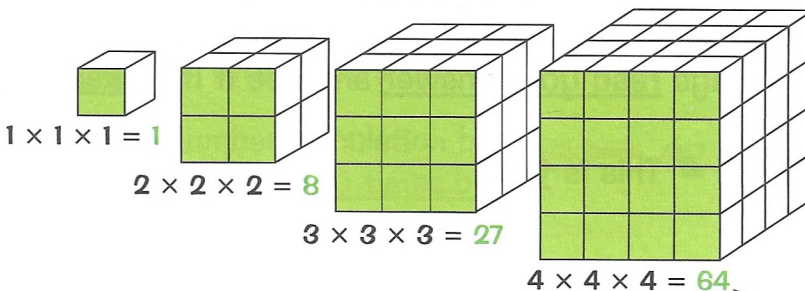
Cube Numbers

You get a cube number by multiplying a number by itself twice.

EXAMPLES:

- 3 cubed = $3 \times 3 \times 3 = 27$.
5 cubed = $5 \times 5 \times 5 = 125$.

They're called cube numbers because they are the volumes in this pattern of cubes:



The quick way to write four cubed is 4^3 .

"I can recognise and use square and cube numbers."

