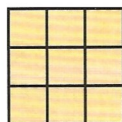


TARGET To use and understand square and cube numbers.

Examples

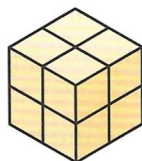
A square number is a number multiplied by itself. They make square patterns.



$$3^2 = 3 \times 3 = 9$$

$$3 \text{ squared} = 9$$

A cube number is a number multiplied by itself and multiplied by itself again.



$$2^3 = 2 \times 2 \times 2 = 8$$

$$2 \text{ cubed} = 8$$

A

Copy and complete.

1 $2^2 = \square$

6 $\square^2 = 81$

2 $10^2 = \square$

7 $\square^2 = 1$

3 $7^2 = \square$

8 $\square^2 = 36$

4 $5^2 = \square$

9 $\square^2 = 121$

5 $12^2 = \square$

10 $\square^2 = 64$

11 Copy and complete, continuing the pattern for the first six rows.

$$1^2 = 1$$

$$2^2 = 1 + 3 = \square$$

$$3^2 = 1 + 3 + 5 = \square$$

$$4^2 = 1 + 3 + 5 + 7 = \square$$

B

Copy and complete.

1 $\square^2 = 1600$

6 $\square^3 = 125$

2 $\square^2 = 3600$

7 $7^3 = \square$

3 $\square^2 = 900$

8 $\square^3 = 27$

4 $\square^2 = 400$

9 $12^3 = \square$

5 $\square^2 = 8100$

10 $\square^3 = 1000$

11 Copy and complete this table for all cube numbers to 12^3 .

Cube	Calculation	Answer
1^3	$= 1 \times 1 \times 1$	$= 1$
2^3	$= 2 \times 2 \times 2$	$= 8$
3^3	$= 3 \times 3 \times 3$	$= 27$
$\vdots$	$\vdots$	$\vdots$

C

Copy and complete.

1 $\square^2 = 250\,000$

6 $20^3 = \square$

2 $\square^2 = 4900$

7 $60^3 = \square$

3 $\square^2 = 40\,000$

8 $100^3 = \square$

4 $\square^2 = 1\,000\,000$

9 $70^3 = \square$

5 $\square^2 = 12\,100$

10 $15^3 = \square$

11 Copy and complete this pattern for all square numbers to 20^2 .

$$0^2 = 0$$

$$1^2 = 0 + 1 = 1$$

$$2^2 = 1 + 3 = 4$$

$$3^2 = 4 + 5 = 9$$

$$4^2 = 9 + 7 = 16$$

Add each successive odd number to the previous square number to find the next.