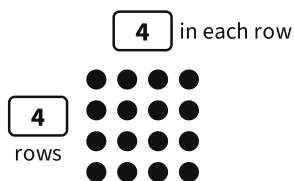


Square Numbers as Square Arrays

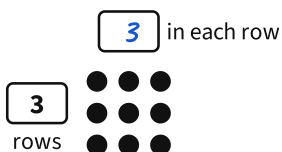
ANSWERS

1
How many dots are in this square?
Side $\times$ side gives the square number.



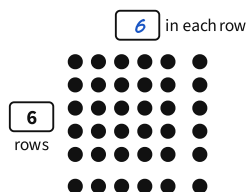
Fact $4 \times 4 = 16$

2
How many dots are in this square?
Side $\times$ side gives the square number.



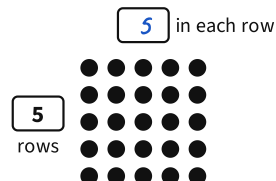
Fact $3 \times 3 = 9$

3
How many dots are in this square?
Side $\times$ side gives the square number.



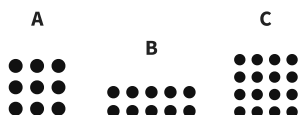
Fact $6 \times 6 = 36$

4
How many dots are in this square?
Side $\times$ side gives the square number.



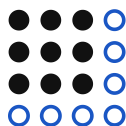
Fact $5 \times 5 = 25$

5
Which of these arrays are squares?



Squares A and C

6
Draw more dots to make this 3 by 3 square into a 4 by 4 square.
How many more dots?



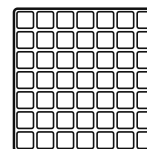
More dots 7

7
Fill in the first 12 square numbers.

1^2	2^2	3^2	4^2	5^2	6^2
1	4	9	16	25	36

7^2	8^2	9^2	10^2	11^2	12^2
49	64	81	100	121	144

8
A square patio has 7 rows of 7 tiles.
How many tiles are there?

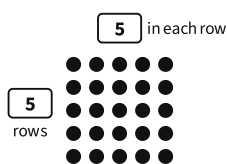


Answer 49 tiles

Square Numbers as Square Arrays *further practice*

ANSWERS

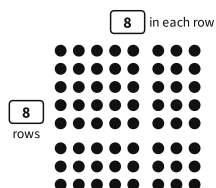
9
Work out 5^2 . It means 5×5 .
Side $\times$ side gives the square number.
The side is the square root.



$5^2 = 5 \times 5$

Answer 25

10
Work out 8^2 . Side $\times$ side gives the square number. The side is the square root.

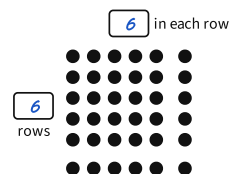


$8^2 = 8 \times 8 = 64$

11
A shop builds a square display of cans, 11 rows of 11. How many cans are in the display?

Answer $11^2 = 121$ cans

12
This square array has 36 dots.
How many are in each row?
Side $\times$ side gives the square number.
The side is the square root.

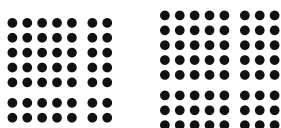


$\sqrt{36} = 6$

13
A square garden is covered with 64 square slabs. How many slabs are along each side?

Answer 8 slabs

14
Is 50 a square number? Use the two squares to explain.



No. $7 \times 7 = 49$ and $8 \times 8 = 64$.

50 is between them.

15
Stickers come on square sheets of 12 rows of 12. How many stickers are on 1 sheet?

Answer 144 stickers

16
Sam says $6^2 = 12$.
Is Sam right? Explain.



No. 6^2 means 6×6 , not 6×2 .

$6^2 = 36$.