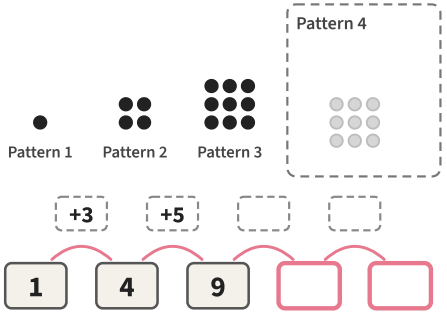
Square and triangular numbers

1

These are the square numbers.
Draw pattern 4. Then find the next two square numbers.

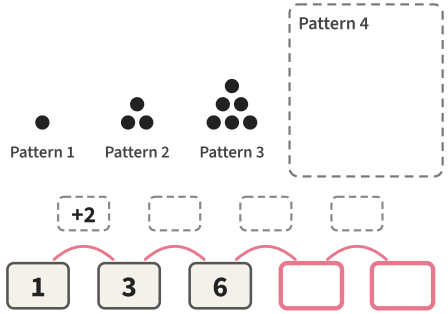


The jump grows by ☐ each time.

Next two _____

2

These are the triangular numbers.
Draw pattern 4. Then find the next two triangular numbers.

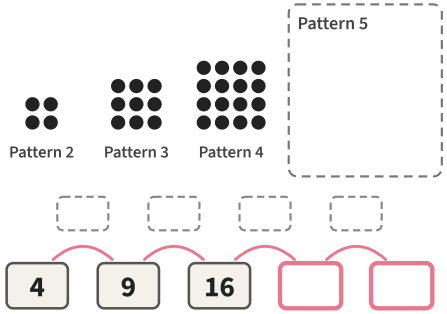


The jump grows by ☐ each time.

Next two _____

3

These are the square numbers.
Draw pattern 5. Then find the next two square numbers.

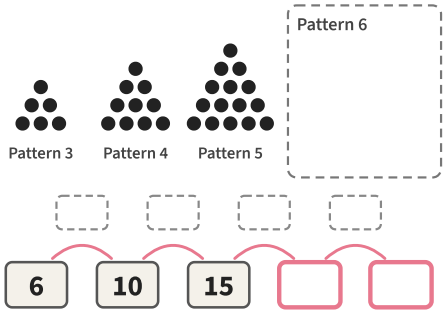


The jump grows by ☐ each time.

Next two _____

4

These are the triangular numbers.
Draw pattern 6. Then find the next two triangular numbers.



Next two _____

5

Here are eight numbers.
3, 8, 10, 16, 21, 25, 30, 49
Write down the square numbers and the triangular numbers.

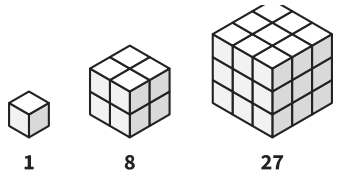
Square _____

Triangular _____

Neither _____

6

These are the first three cube numbers.
Write down the next two cube numbers.



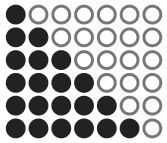
_____

_____

Next two _____

7

Two copies of pattern 6 of the triangular numbers fit together to make this rectangle. How many dots are in pattern 6?



_____

_____

Answer _____

8

Lily says the square numbers are 1, 4, 7, 10, 13, … because they go up by 3 each time. Explain what Lily has done wrong. Then write the first five square numbers.

_____

_____

Square numbers _____

Square and triangular numbers *further practice*

9

Write down the 7th square number and the 7th triangular number.

7th square _____

7th triangular _____

10

Write down all the square numbers between 50 and 100.

Answer _____

11

Zara covers a square patio with 100 square tiles. Each side has the same number of tiles. How many tiles are along each side?



Answer _____

12

A shop stacks cans in a triangle.
There is 1 can in the top row, 2 cans in the next row, and so on.
The bottom row has 7 cans.
How many cans are there altogether?

Answer _____

13

A large cube is built from 125 small cubes. How many small cubes are along each edge?

Answer _____

14

Find two square numbers that add up to 41.

Answer _____

15

Find a number between 50 and 100 that is a square number and also a cube number.

Answer _____

16

Tom says the jump between two square numbers next to each other is always an odd number. Is Tom right? Explain how you know.

Answer _____