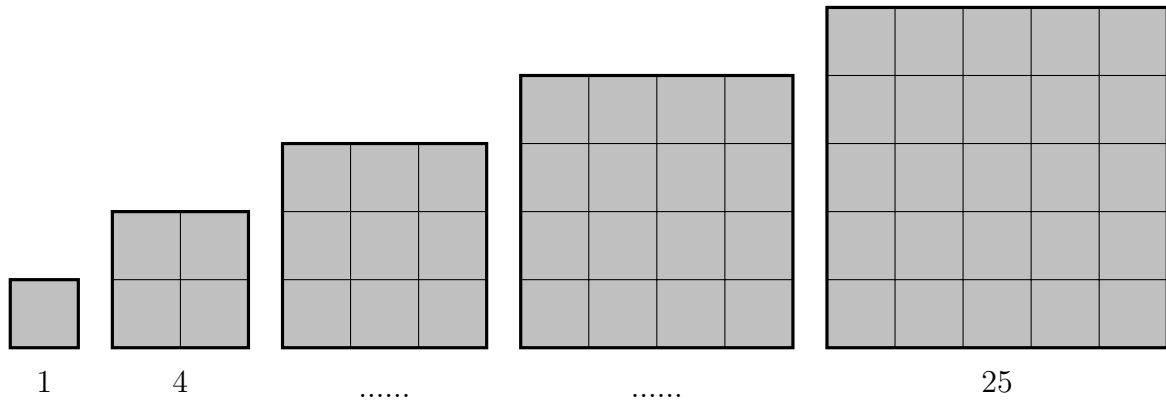
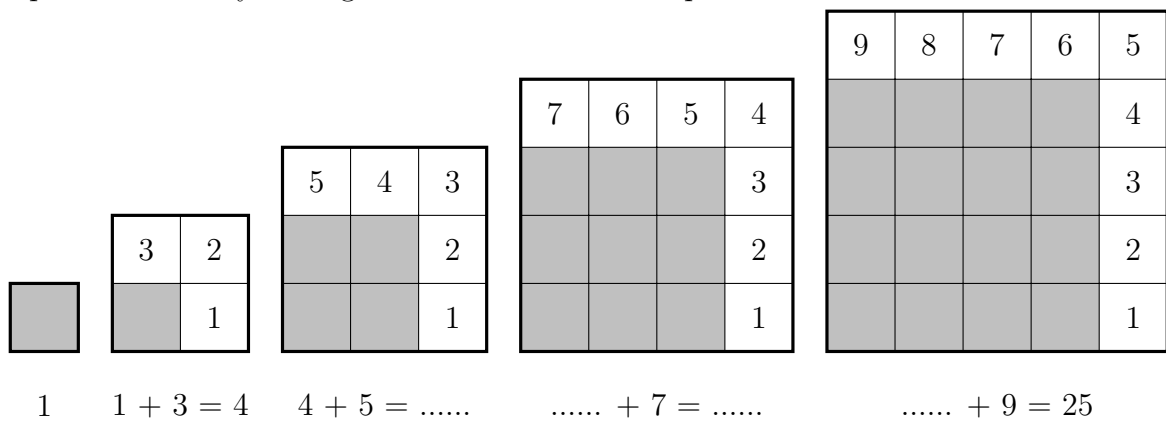


1. The area of squares (with side lengths that are a whole numbers) are called square numbers.

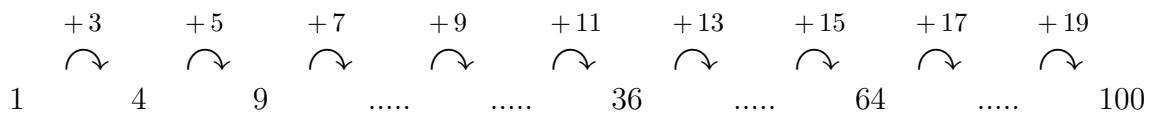
(a) Complete in the diagram below, the area of the squares, which are square numbers.



(b) Complete the number pattern in the diagram below. It shows how to form the next square number by adding on an odd number of squares.

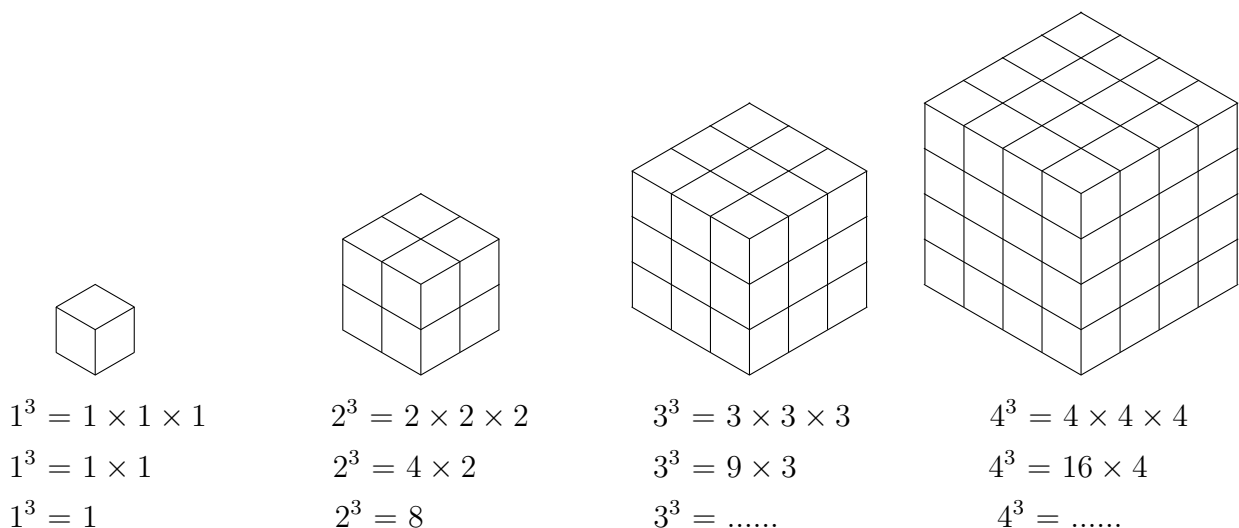


(c) Completing the sequence below, to find the missing square numbers.



2. The volume of cubes (with side lengths that are a whole numbers) are called cube numbers.

Complete in the diagram below, the volume of the cubes, which are cube numbers.



Turn over for practice questions and answers.

3. Here is a list of numbers.

6 8 9 12 13 14 16 50 90

From the numbers in the list, write down two square numbers.

3.

4. Here is a list of numbers.

9 19 20 21 25 27 35 45

From the numbers in the list, write down a cube number.

4.

5. Here is a list of numbers.

5 6 8 20 27 35 36 50 65

From the numbers in the list, write down the square number.

5.

6. Here is a list of numbers.

3 8 10 12 14 28 30 32 64

From the numbers in the list, write down a square number.

6.

7. Here is a list of numbers.

4 8 10 16 17 18 24 100

From the numbers in the list, write down a cube number.

7.

8. Here is a list of numbers.

3 8 10 12 14 28 30 32 64

From the numbers in the list, write down a square number.

8.

Answers: 1a) 9 16 1b) $4 + 5 = 9$ $9 + 7 = 16$ $16 + 9 = 25$ 1c) 16 25 49 81
2) 27 64 3) 9 and 16 4) 27 5) 26 6) 64 7) 125 8) 64