

1. The numbers in this sequence increase by 75 each time.

Write in the two missing numbers.



725

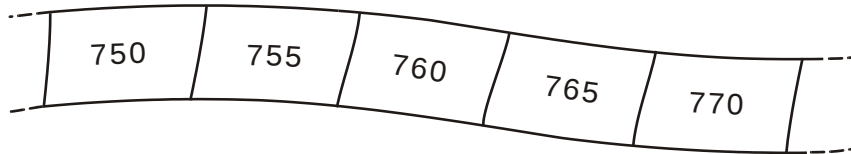
800

875

950

2. Here is part of a number sequence.

The numbers increase by the same amount each time.



The sequence continues.

Circle **all** of the numbers below that would appear in the sequence.



840

905

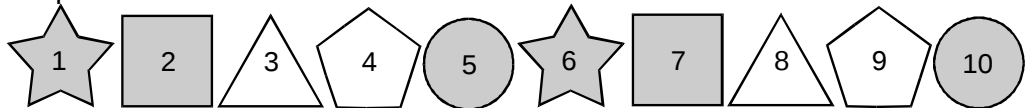
989

1000

2051

3. Here is a repeating pattern of shapes.

Each shape is numbered.



The pattern continues in the same way.

Write the numbers of the next two **stars** in the pattern.



and

Complete this sentence.

Shape number 35 will be a circle because ...



.....

.....

.....

4. The first two numbers in this sequence are 2.1 and 2.2

The sequence then follows the rule

'to get the next number, add the two previous numbers'

Write in the next two numbers in the sequence.



2.1

2.2

4.3

6.5

5. A sequence starts at **500** and **80** is **subtracted** each time.

500

420

340 ...

The sequence continues in the same way.

Write the **first two numbers** in the sequence which are **less than zero**.



6. Megan makes a sequence of numbers starting with **100**.

She **subtracts 45** each time.

Write the next **two** numbers in the sequence.

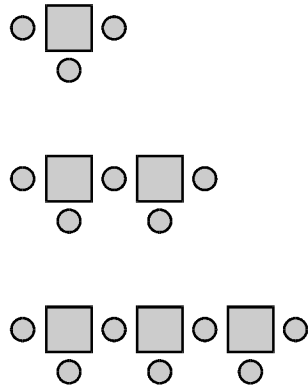


100

55

10

7. Here is a sequence of patterns made from squares and circles.



number of squares	number of circles
1	3
2	5
3	7

The sequence continues in the same way.

Calculate how many **squares** there will be in the pattern which has **25 circles**.



Show your **working**.
You may get a mark.