Patterns and Sequences

For each of the sequences given, decide whether it is special, arithmetic, quadratic or geometric, then write down the next two terms.
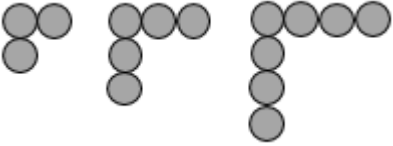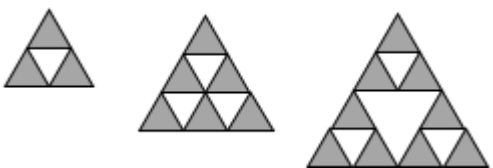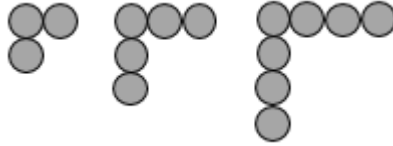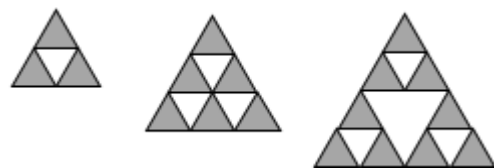
(a) 1, 1, 2, 3, 5, 8,…

(b) 4, 7, 10, 13,…

(c) 2, 4, 8, 16,…

(d) 10, 8, 6, 4, 2,…

(e) 1, 3, 6, 10, 15,…

(f) 160, 80, 40, 20,…

(g) 2, 5, 10, 17,…

(h) 1, 3, 5, 7, 9,…

For each of these sequences, draw the next two patterns in the sequence.

(a)

(b)

(c)

The first three terms of a Fibonacci sequence are:

$a \quad b \quad a+b$

Show that the 6th term is $3a + 5b$