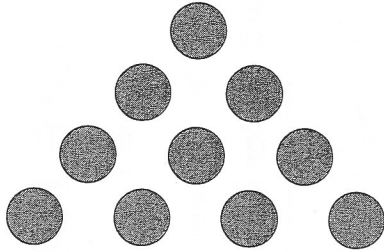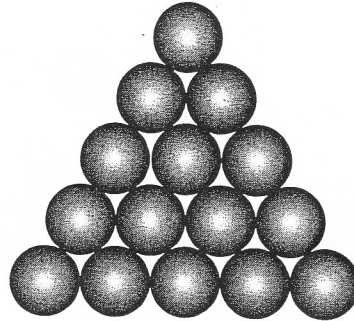# 2.7 Triangular numbers

Have you ever been ten-pin bowling or played pool?

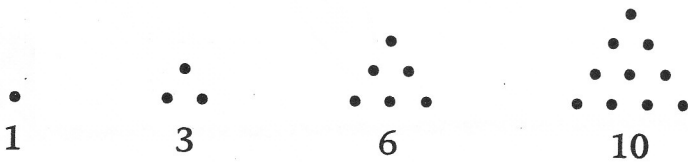The 10 pins are arranged in a triangular pattern.

The 15 pool balls start in a triangular pattern.

Numbers like 10 and 15 are called **triangular numbers**.
They can be represented by a pattern of dots in the shape of a triangle.
Here are the first four numbers in this pattern.

1        3        6        10

**1**    What is the next triangular number? _____

**2**    Draw the next diagram in the pattern above.

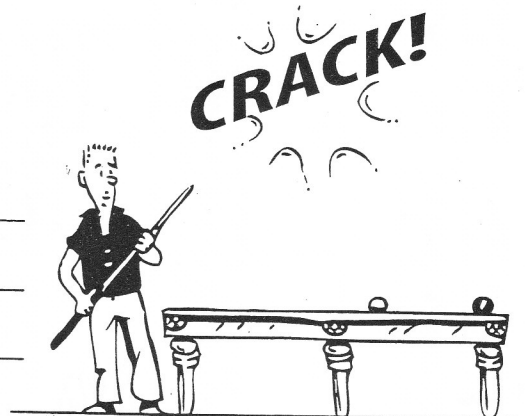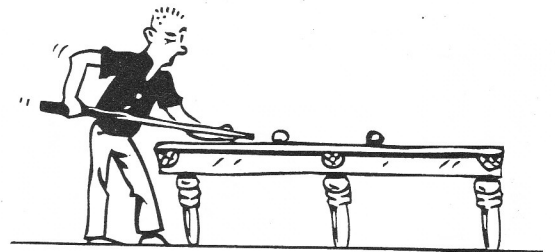**3**    Compare these number sentences
with the dot diagrams.
Complete three more lines of this pattern.

$1 = 1$

$1 + 2 = 3$

$1 + 2 + 3 = 6$

$1 + 2 + 3 + 4 = 10$

_____

_____

_____

**CRACK!**

**4**    Write the first ten triangular numbers.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |