## **Making triangles**

## This task is about patterns and rules.

Fill in the spaces below to show the next 2 triangular numbers in the sequence. Draw a diagram for these numbers.

3 is a triangular number: ••

6 is the next triangular number:

a) \_\_\_\_\_ is the next triangular number. Diagram:

b) is the next triangular number. Diagram:

c) Complete this sentence: "Each row is n + \_\_\_\_\_ of the row before it."

d)In a supermarket Jane builds up a display of tins of soup like this:



1 tin

Add 3 tins Stack 2 tins high Stack 3 tins high Total: 6 tins

and so on. . .

If there were a total of 28 tins, how many tins high would the stack be?

Total: 3 tins

- (**A**) 6
- **(B)** 7
- (**C**) 14
- (**D**) 28
- (**E**) 56

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