



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: 

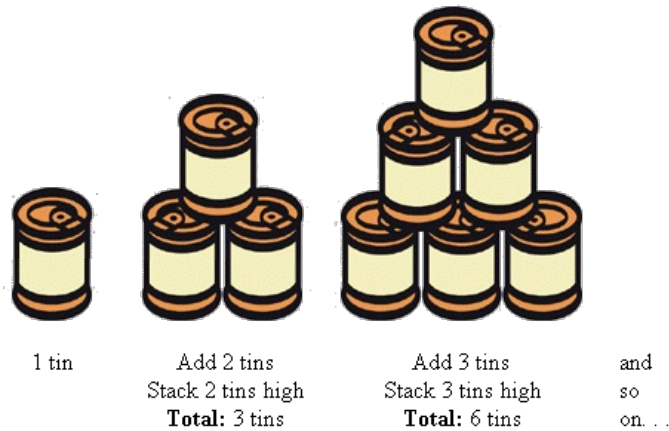
6 is the next triangular number: 

a) _____ is the next triangular number. Diagram:

b) _____ is the next triangular number. Diagram:

c) Complete this sentence: "Each row is $n + \underline{\hspace{1cm}}$ of the row before it."

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



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

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