**The Triangle Dots Task**

The figure below contains a drawing of a 5-dot triangle made by using 5 dots on each side of the triangle. The 5-dot triangle requires a total of 12 dots to construct.

How many dots will be used to make a 2-dot triangle?

A 3-dot triangle?

* A 4-dot triangle?

* A 10-dot triangle?

* A 100-dot triangle?
* An n-dot triangle?

[This problem was adapted from Blanton, M. L. (2008)’s *Algebra and the elementary classroom: Transforming thinking, transforming practice*, p. 185]