

Investigation Guide for Plate Triangles – Task 28

Complete after original task card.

Investigation

Triangular number patterns.

Your Task

Record the 8 triangular numbers found in the Task.

Find the thirteenth and fourteenth triangular numbers. Explain your strategy.

What triangular numbers are closest to 200? Explain your strategy.

Are there patterns of odd and even triangular numbers? Describe these patterns.

Add the two adjacent triangle numbers and record. Can you see a pattern? What are these numbers called?

List some triangle numbers that are also square numbers.

Challenge

What is the first triangle number after 1000? What strategy did you use?