DISCUSSION FOR EIGHTH TUTORIAL
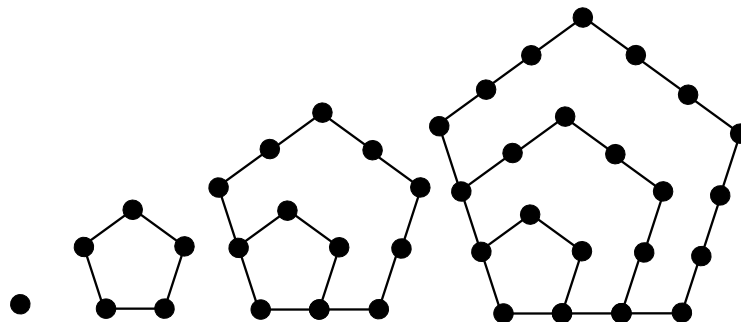
From Thinking Mathematically (2nd edition p. 187, revised edition p. 170).

A number which can be represented as the number of dots in a triangular array is called a 'triangular' number

A number which can be represented in a pentagonal array is called pentagonal number.

Which numbers are triangular? which number are pentagonal? More generally, which numbers are p-polygonal?