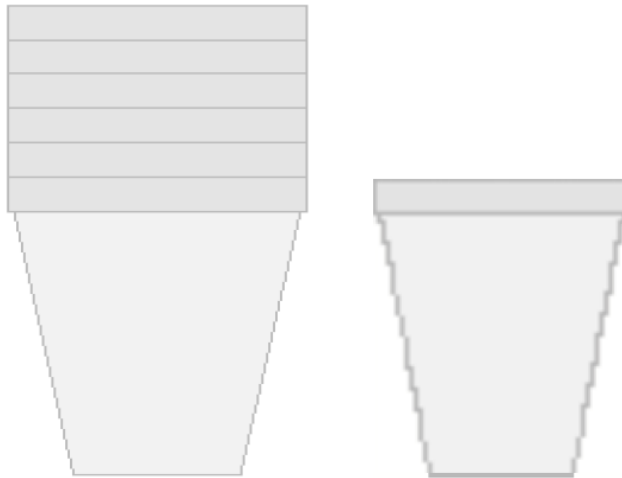


Concept Task

A Stack of Cups

Your task is to represent the relationship between the size of the cups and the height of the stack of cups using a formula and a graph. Then answer the questions below about the stack of cups.

The paper cups shown below are identical and drawn full size:



- a) By making measurements, represent the relationship between the number of cups and the height of the stack using a formula and a graph.
- b) The graph can be drawn as a set of discrete points on a coordinate system. These points *lie along a line* and can be connected by a straight line.
- Why is the line straight?
 - What are the slope and intercept of this line?
 - Interpret the meaning of the slope and intercept with regard to the number and size of the cups, or parts of the cups.