

Grade 11 Essential Unit F Graphing Lines Puzzle

Name: _____

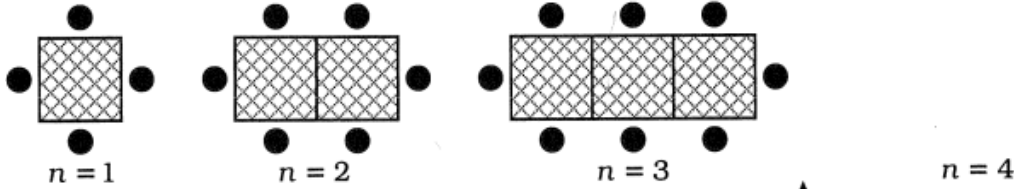
Date: _____

How Does a Backward Poet Write?

For each situation, complete the table and graph.
For table cells with letters, write the letter in the corresponding box at right.

23	18	15	6 E	31	12	7
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Situation # 1. Arranging tables.



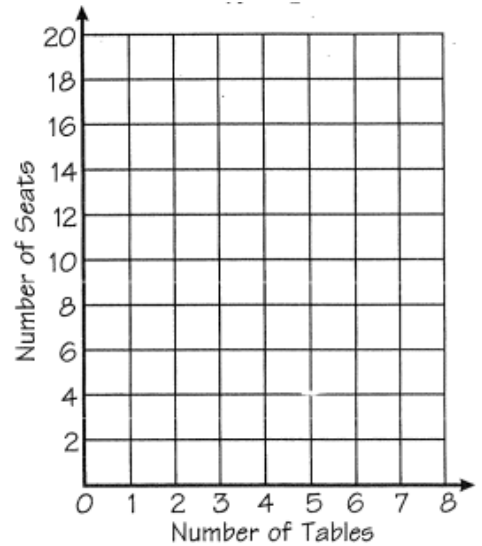
A square table has one seat on each side. Square tables are pushed together to make banquet tables. Draw banquet table #4 in the pattern above. Then complete the table and graph to show how the number of seats varies with the number of tables that are pushed together.

Let n = Number of tables
 S = Number of seats

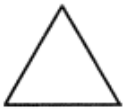
Equation:

? \rightarrow $S =$

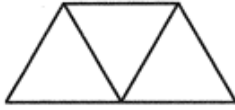
n	S
1	4
2	6 E
3	
4	
5	S
6	
7	
8	N



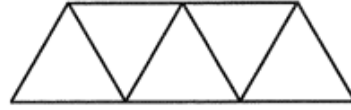
Situation #2. Building Bridges.



$n = 1$



$n = 2$



$n = 3$

$n = 4$

These bridges are constructed using rods to make equilateral triangles. The length of a bridge is the number of rods used to construct the bottom span. Draw bridge #4 in the pattern above. Then complete the table and graph to show how the number of rods used varies with the length of the bridge.

Let n = Length of bridge

R = Number of rods

Equation:

? $\rightarrow R =$

n	R
1	
2	E
3	
4	V
5	
6	I
7	
8	R

