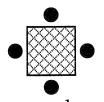
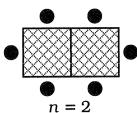
How Doesa Backward Poet Write?

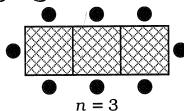
For each situation, complete the table and graph. For table cells with letters, write the letter in the corresponding box at right.

23	18	15	6	31	12	7

Situation#1. Arranging Tables.







n = 1

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.

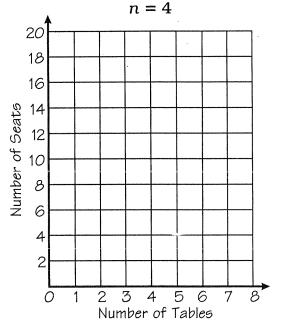
Let n =Number of tables

S = Number of seats

Equation:

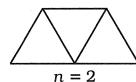
S =

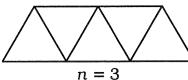
n	S
1	
2	E
3	
4	
5	s
6	
7	
8	N



Situation #2. Building Bridges.







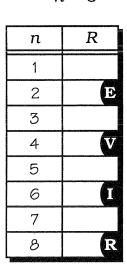
These bridges are constructed using rods to make equilateral triangles. The length of a bridge is the number of rods used to construct the bottom span. Draw bridge #4 in the pattern above. Then complete the table and graph to show how the number of rods used varies with the length of the bridge.

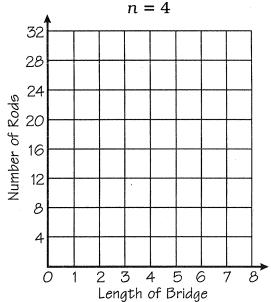
Let n = Length of bridgeR =Number of rods

Equation:

R =

Linear Equations and Their Graphs: Linear Patterns





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What Do You Call a Scary Dog That Knows What's Happening?

12

0

400

25 200

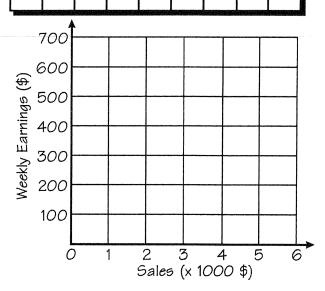
5

28 700

For each situation, complete the table, then draw two graphs and write two equations. For table cells with letters, write the letter in the corresponding box at right.

Sales Job. Prime
Products will pay you a
weekly salary of \$100
plus 10% of sales. Digit
Displays will pay you a
weekly salary of \$300
plus 5% of sales. Show
how your total weekly
earnings at each store is
a function of your sales.
Equations:

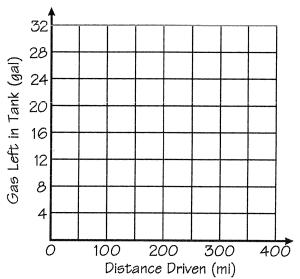
Description of the last of the			
Sales	Earnings (\$/wk)		
(\$/wk)	Prime	Digit	
0	100	300	
1000	Ð		
2000		A	
3000			
4000			
5000			
6000	F		



Burning Gas. A Turbo averages 10 miles per gallon, and the gas tank holds 30 gallons. A Tork averages 25 miles per gallon, and its gas tank holds 16 gallons. If both cars start with full tanks, show how the amount of gas left in the tank is a function of the number of miles driven.

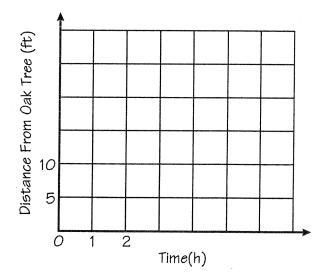
Equations :

Gas Left (gal) Miles Driven Turbo Tork 0 30 16 50 A 100 O 150 200 250 300 350 400 W



Crawlin' Critters. An oak tree is 30 ft from an elm tree. A snail started crawling from the oak to the elm at a rate of 4 ft/h. A turtle started crawling from the elm to the oak at a rate of 5 ft/h. Show how the distance of each animal from the *oak* tree is a function of time since they started crawling. **Equations:**

Time	Distance (ft)		
(h)	Snail	Turtle	
0	0	30	
1		R	
2			
3			
4			
5		(w	
6			
7	(L		



Linear Equations and Their Graphs: Equations, Tables, and Graphs for Linear Relationships

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