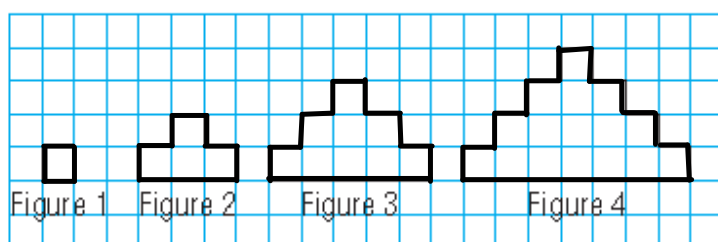


4.1

1. This pattern of squares continues.



- a) Make a table that shows the figure number, n , and the perimeter of a figure, P . What patterns do you see?

Figure#	Perimeter

- d) Write an equation that relates P to n .

- b) Write an expression for the perimeter of figure n .

- c) What is the perimeter of figure 40?

- e) Which figure has a perimeter of 136 units? How do you know?

2. A phone company charges a fixed cost of \$10 per month, plus \$0.25 per minute for long distance calling.
- a) Write an equation that relates the monthly cost, C dollars, to t , the time in minutes.

b) In one month, the time for the long distance calls was 55 minutes. What was the monthly cost?

c) For one month, the cost was \$22.50. How many minutes of long distance calls were made?

5. Each table of values represents a linear relation. Copy and complete each table. Explain your reasoning.

a)

x	y
1	10
2	14
3	
4	
5	

b)

x	y
1	
3	-10
5	-14
7	
9	

3. Create a table of values for each linear relation, then graph the relation.
Use values of x from -3 to 3 .

b) $y = 2x$

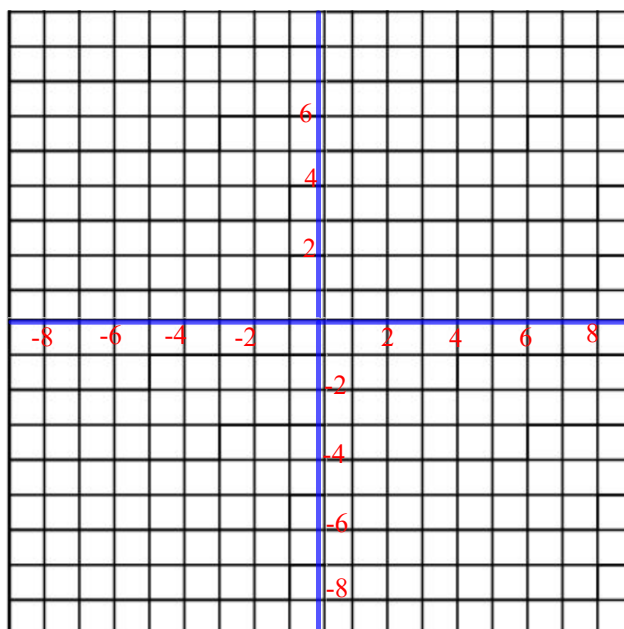
x	y
-3	—
-2	—
-1	—
0	—
1	—
2	—
3	—

d) $y = -2x + 4$

x	y
-3	—
-2	—
-1	—
0	—
1	—
2	—
3	—

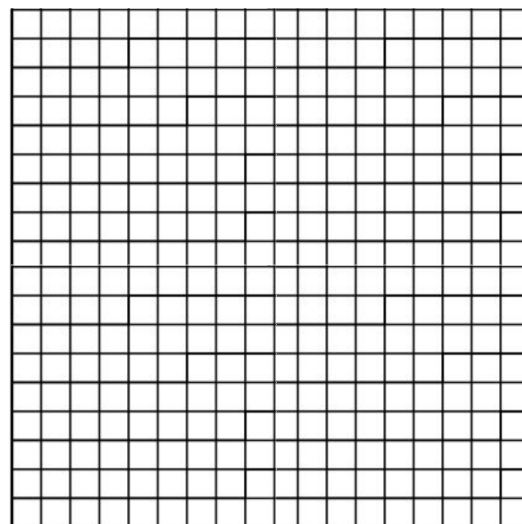
f) $y = -x + 3$

x	y
-3	—
-2	—
-1	—
0	—
1	—
2	—
3	—



4. Alicia buys a \$300-jacket on lay away. She made a down payment of \$30 and is paying \$15 per week. The total paid, P dollars, after n weeks can be represented by the equation $P = 15n + 30$.

- a) Create a table of values to show the total paid in each of the first 5 weeks.
- b) Graph the data. Should you join the points on the graph? Explain.
- c) How do the patterns in the graph relate to the patterns in the table?



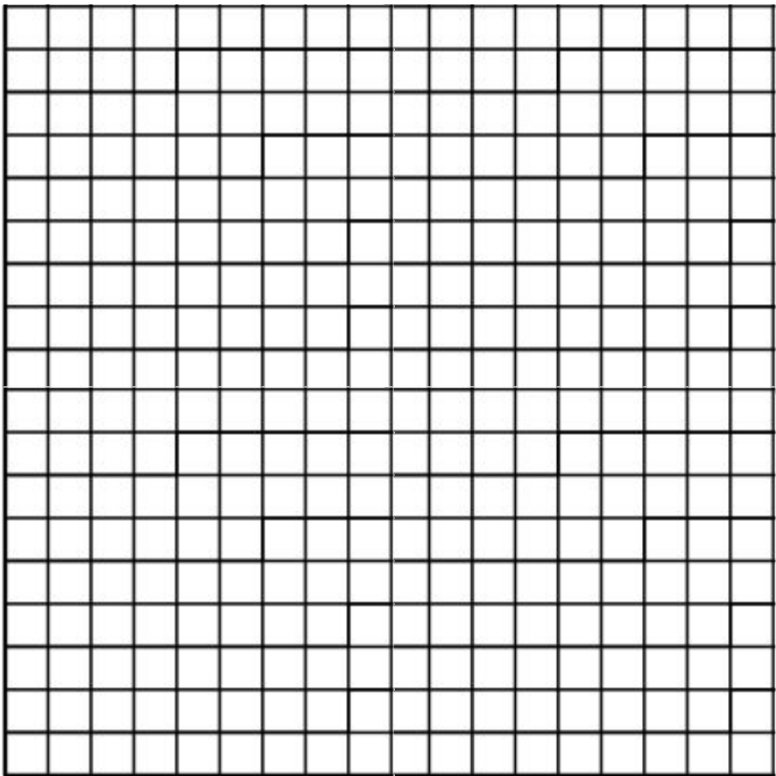
6. a) Graph each equation.

i) $y = 1$

ii) $x = -4$

iii) $x + y = 8$

iv) $2x - y = 12$



7. The difference of two numbers is 1.
Let g represent the greater number and
 n the lesser number.
- a) Complete a table for 4 different values
of n .
 - b) Graph the data. Should you join the
points? Explain.
 - c) Write an equation that relates n and g .

