

Chapter 6 : Representing Patterns

NAME: _____

① Determine the linear equation from each table of values

a)

x	1	2	3	4	5
y	6	10	14	18	22

b)

x	1	2	3	4	5
y	2	7	12	17	22

c)

x	1	2	3	4	5
y	9	12	15	18	21

d)

x	6	7	8	9	10
y	5	7	9	11	13

e)

x	3	4	5	6	7
y	12	19	28	39	52

(2) a) Graph the equation $y = 5x + 2$ below

b) This is called a LINEAR RELATIONSHIP.
Why?

PATTERN PROBLEMS

③

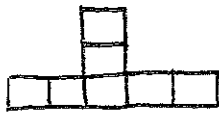
a) Draw the next tower in this pattern



Tower 1



Tower 2



Tower 3

b) Describe the pattern in words.

c) Create a table of values to show the linear relationship between the tower number and the number of squares.


d) Write a linear relation (equation) to represent this pattern.


e) Calculate how many squares are in tower 15.


f) Which tower requires 112 squares?
Verify your answer.

g) Graph this relation below.

④ a) Draw the next figure in this pattern.


figure 1


figure 2


figure 3

b) Describe this pattern in words.

c) Create a table of values to represent the linear equation between the figure number and the number of circles

d) Write a linear equation for this pattern.

e) Calculate how many circles are in figure
53 ?

f) Which figure requires 237 circles?

g) Use the table of values to graph the relation.

