

Course 3 Chapter 3 Study Guide

1.) Study the tile pattern below.

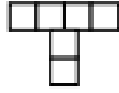


Fig. 0

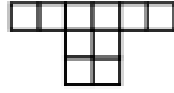


Fig. 2

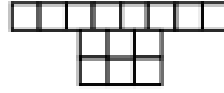


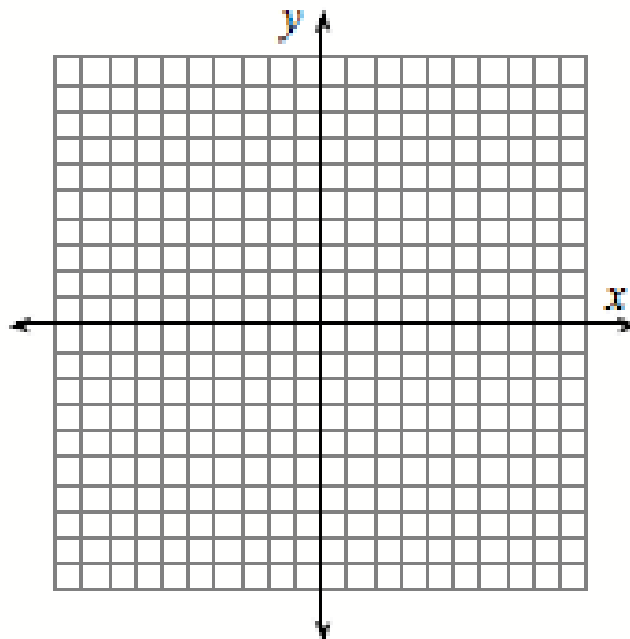
Fig. 3

Fig. 4

- a. Draw figure 0 and figure 4
- b. Create a table to match the pattern above.

Figure Number	0	1	2	3	4	5
Number of Tiles						

- c. Create a rule (equation) to match the pattern above.
- d. Create a graph to match the pattern above.



e. How many tiles will be in figure 50? Show how you found your answer.

f. Is there a figure that would have 100 tiles? If so, which figure is it? Show how you found your answer.

2.) a. Betty plans to bike to Morro Bay to meet her friends for lunch. On average, Betty bikes 5 miles to work in 22 minutes. How long will Betty take to bike to lunch, which is 15 miles away?

b. If Betty has been biking for 3 hours, how many miles has she traveled?

3.) Solve each equation. Show all work.

a. $6x - 3 = 3x + 3$

b. $4y - 6 - y = 2y - 1$

c. $4 + 5x + 1 = x + 7 + 2x$

d. $7 = 5y - 3 - (2y - 2)$

e. $3(4x + 5) = 2x - 6 + 2x$

f. $-(2x + 5) = -3x + (-5) + x$

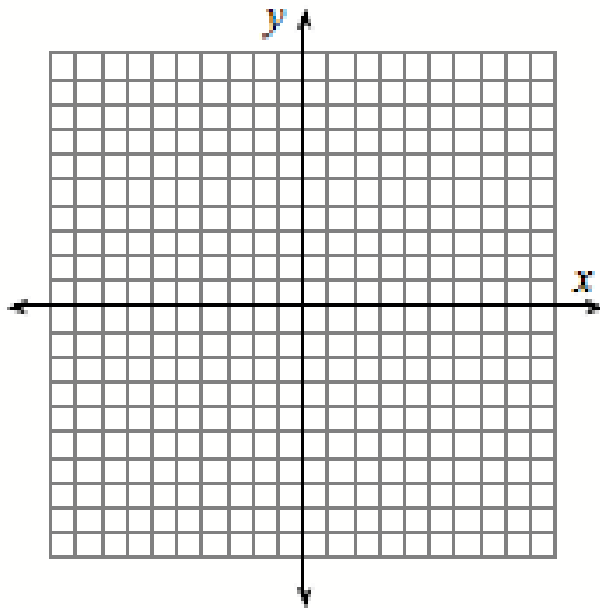
g. How do you know if an equation had infinitely many solutions? Give examples to support your reasoning.

4.) Using the rule $y = -2x - 1$,

a. Make a table for the rule.

X	-3	-2	-1	0	1	2	3	4
Y								

b. Use your table to graph your rule. Make sure your graph is complete.



c. Does $(-4, 9)$ follow the rule? Explain how you know.