


Daily Lesson Plans - Algebra 1 AA - Lesson 3.2 Thurs, Oct 1 and Fri, Oct. 2

Lesson Objectives & Standards Addressed	In this lesson you will <ul style="list-style-type: none">• use your calculator to apply several recursive routines at once• graph values generated by recursive routines• understand how the start value and rule of a recursive routine are reflected in the graph
Daily Agenda 	<p><u>Thursday</u> Complete Warm-Up Check and correct Warm-Up Check and correct homework (p. 161 #1, 2a-c, 4c-d, 6) Begin Notes Lesson 3.2 as a class Begin the Investigation in small groups</p> <p><u>Friday</u> Finish Investigation through Step 8 Discuss Investigation Begin work on homework (if time)</p> <p>we will discuss investigation on Monday!</p> <p>Have a great weekend!</p>
Homework Assigned	p. 168 #1-3, 7, 8, and 11 – due Friday Worksheet 3.1/3.2 – due Monday

Lesson 3.1 • Recursive Sequences homework

Name _____ Period _____ Date _____

1. Evaluate the expression $\frac{2(3x+1)}{-4}$ for each value of x .

- a. $x = 9$ b. $x = 2$ c. $x = -1$ d. $x = 14$

2. Consider the sequence of figures made from triangles.

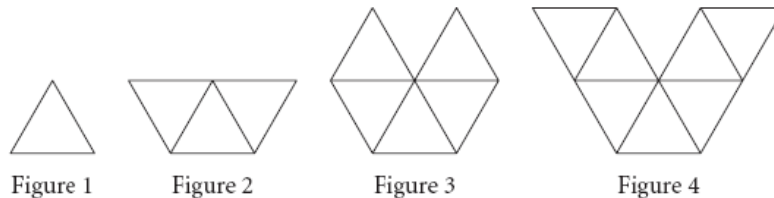


Figure #	Perimeter
1	3
2	5
3	
4	
5	

- a. Complete the table for five figures.
 b. Write a recursive routine to find the perimeter of each figure.
 c. Find the perimeter of Figure 10.
 d. Which figure has a perimeter of 51?

3. List the first six values generated by the following recursive routine:

-27.4

Ans + 9.2 , , ...

4. Write a recursive routine to generate each sequence. Then use your routine to find the 10th term of your sequence.

- a. $7.8, 3.6, -0.6, -4.8, \dots$ b. $-9.2, -6.5, -3.8, -1.1, \dots$
 c. $1, 3, 9, 27, \dots$ d. $36, 12, 4, 1.\bar{3}, \dots$

5. Ben's school is $\frac{3}{4}$ mile, or 3960 feet, away from his house. At 3:00, Ben walks straight home at 330 feet per minute.

- a. **Write** a recursive routine that calculates how far Ben is from home each minute after 3:00.
 b. How far is he from home at 3:05?
 c. At what time does Ben arrive home?

Lesson 3.2 • Linear Plots

Name _____ Period _____ Date _____

1. Solve each equation.

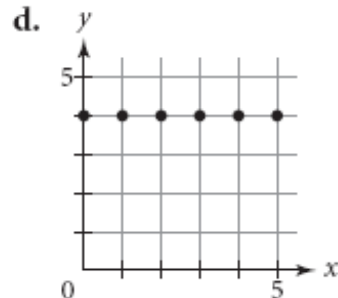
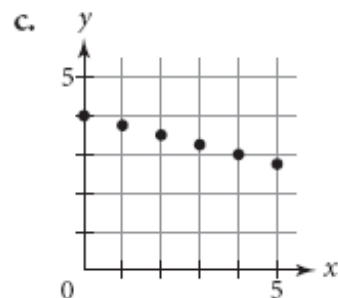
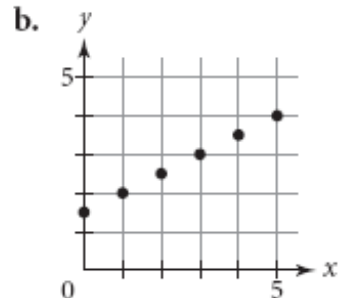
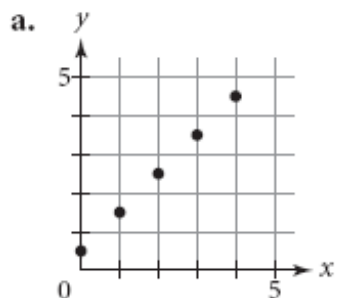
a. $8(x - 3) - 9 = -25$

b. $16 - 5(x - 4) = 46$

c. $\frac{37 - 2(x + 8)}{4} = 4$

d. $\frac{-3(x - 9) + 4}{-4} = -10$

2. List the terms of each number sequence of y -coordinates for the points shown on each graph. Then write a recursive routine for each sequence.



3. Plot the first five points represented by each recursive routine on separate graphs.

a. $\{0, 4\}$

$\{\text{Ans}(1) + 1, \text{Ans}(2) + 3\}$, , ...

b. $\{2, 6\}$

$\{\text{Ans}(1) + 1, \text{Ans}(2) - 0.25\}$, , ...

c. $\{4, -1\}$

$\{\text{Ans}(1) + 1, \text{Ans}(2) - 2\}$, , ...

4. Consider the following expression:

$$\frac{4(x - 5) - 8}{-3}$$