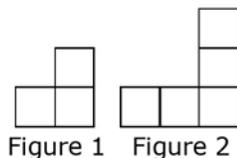


Section 6.1 Extra Practice

1. a) Draw the next 2 figures in this series.



b) Complete the table of values comparing the figure number and number of squares.

Figure Number (n)	Number of Squares(s)
1	
2	
3	
4	

c) The pattern starts with _____ squares in the first figure.

Then, add _____ squares to make the next figure.

d) Develop the equation that shows this pattern.

Figure Number, n	Multiply by 2	$n \times 2$	Add 1 To Result	Number of Squares, s
1	$\times 2 \rightarrow$	2	$2 + 1 \rightarrow$	
2	$\times 2 \rightarrow$	4	$4 + 1 \rightarrow$	
3	$\times 2 \rightarrow$		_____ - _____ \rightarrow	
4	$\times 2 \rightarrow$		_____ - _____ \rightarrow	

$s =$ _____ or _____ $= s$

e) How many squares are in Figure 15?

f) Which figure has 69 squares?



Name: _____

Date: _____

BLM 6-2
(continued)

2. A number pattern starts at -5. Each number after that is 4 more than the number before.

a) Make a table of values for the first 5 terms.

Term Number, n	1	2			
Term Value, v	-5				

b) Develop an equation that can be used to determine the value of each term in the pattern.



Term Number, n	Multiply by 4	$n \times 4$	Subtract 9 From Result	Term Value, v
1	$\times 4 \rightarrow$	4	$4 - 9 \rightarrow$	
2	$\times 4 \rightarrow$	8	$8 - 9 \rightarrow$	
3	$\times 4 \rightarrow$		_____ - _____ \rightarrow	
4	$\times 4 \rightarrow$		_____ - _____ \rightarrow	

c) What is the value of the 95th term? d) Which term has a value of 219?



3. What linear equation models the relationship between the values in each table?

a)

<i>d</i>	<i>t</i>
0	11
1	16
2	21
3	26

<i>d</i>		<i>t</i>
0	\times _____ + _____ \rightarrow	
1	\times _____ + _____ \rightarrow	
2	\times _____ + _____ \rightarrow	
3	\times _____ + _____ \rightarrow	

b)

<i>c</i>	<i>r</i>
1	2
2	0
3	-2
4	-4

<i>c</i>		<i>r</i>
1	\times _____ + _____ \rightarrow	
2	\times _____ + _____ \rightarrow	
3	\times _____ + _____ \rightarrow	
4	\times _____ + _____ \rightarrow	

Linear Equation: _____

Linear Equation: _____

4. Sam's cell phone plan charges a fee of \$45 per month. He is also charged \$0.15 for every text message he sends or receives.

a) Develop an equation to calculate Sam's monthly bill.

$C =$ _____

Let C = the cost in dollars.
Let t = 1 text message.

b) Complete a table of values showing how the monthly cost is related to the number of text messages.

Number Of Text Messages, <i>t</i>	Monthly Cost, <i>C</i>



Name: _____

Date: _____

BLM 6-2
(continued)

c) What would Sam's bill be if there were 20 text messages in a month?

d) If Sam budgets \$80 a month for his cell phone, how many text messages can he send or receive each month?

