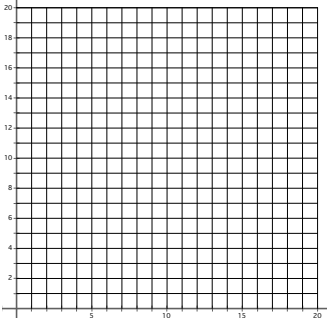
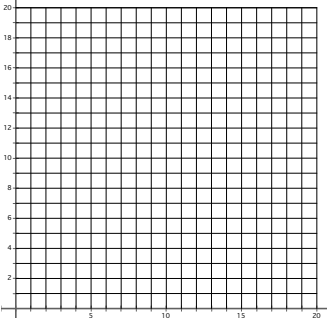


READY, SET, GO!	Name _____	Period _____	Date _____
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**READY**

Topic: Comparing linear and exponential models.

**Comparing different characteristics of each type of function by filling in the cells of each table as completely as possible.**

	$y = 4 + 3x$	$y = 4(3^x)$								
1. Type of growth										
2. What kind of sequence corresponds to each model?										
3. Make a table of values	<table border="1" style="margin: auto; border-collapse: collapse;"> <tr> <td style="padding: 5px;">x</td> <td style="padding: 5px;">y</td> </tr> <tr> <td style="height: 100px;"> </td> <td> </td> </tr> </table>	x	y			<table border="1" style="margin: auto; border-collapse: collapse;"> <tr> <td style="padding: 5px;">x</td> <td style="padding: 5px;">y</td> </tr> <tr> <td style="height: 100px;"> </td> <td> </td> </tr> </table>	x	y		
x	y									
x	y									
4. Find the rate of change										
5. Graph each equation. Compare the graphs. What is the same? What is different?										
6. Find the y-intercept for each function.										

7. Find the y-intercepts for the following equations

a)  $y = 3x$

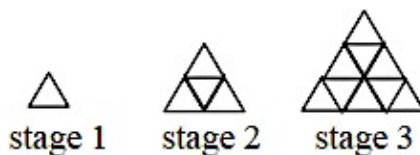
b)  $y = 3^x$

8. Explain how you can find the y-intercept of a linear equation and how that is different from finding the y-intercept of a geometric equation.

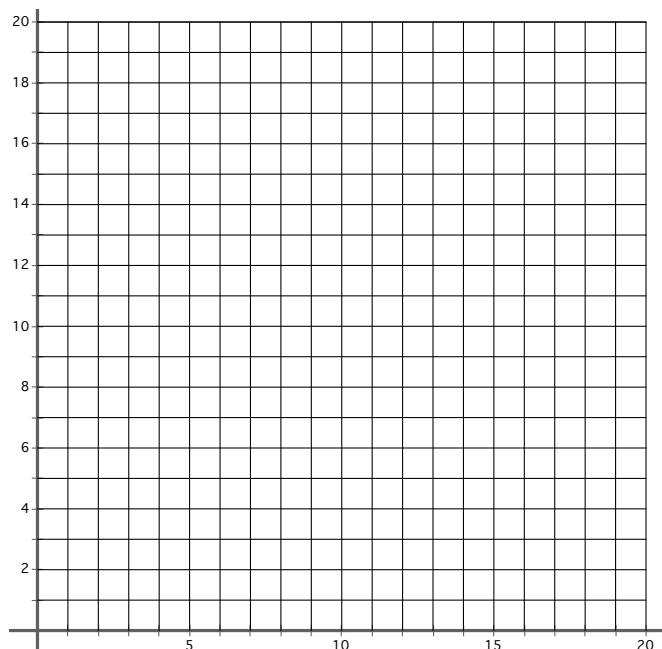
**SET**

Topic: Finding Patterns.

Use the sequence of figures to answer questions 9 - 11.



9. Graph.



10. Table

Stage	# of small triangles
1	
2	
3	
4	
5	
⋮	
10	

11. Write an explicit function to describe the pattern

**GO**

Topic: Solving one-step equations with justification.

Recall the two properties that help us solve equations.

The **Additive property of equality** states:

You can add any number to both sides of an equation and the equation will still be true.

The **Multiplicative property of equality** states:

You can multiply any number to both sides of an equation and the equation will still be true.

Solve each equation. Justify your answer by identifying the property(s) you used to get it.

Example 1: $x - 13 = 7$		<u>Justification</u>	
$+13 \quad +13$		additive property of equality	
$x + 0 = 20$		addition	
$x = 20$		additive identity (You added 0 and got x.)	
Example 2: $5x = 35$		<u>Justification</u>	
$\frac{5}{5}x = \frac{35}{5}$		multiplicative property of equality (multiplied by $\frac{1}{5}$ )	
$1x = 7$		multiplicative identity (A number multiplied by its reciprocal = 1)	
12.	$3x = 15$	<u>Justification</u>	
13.	$x - 10 = 2$	<u>Justification</u>	
14.	$-16 = x + 11$	<u>Justification</u>	
15.	$6 + x = 10$	<u>Justification</u>	
16.	$6x = 18$	<u>Justification</u>	
17.	$-3x = 2$	<u>Justification</u>	