

Name: Answer Key
 Serafino · Geometry

Per: 6,8

Date: 9/22/16
 M T W R F

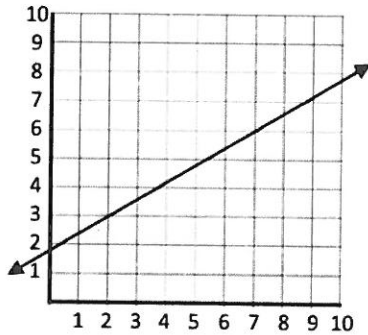
Review

Linear Equations

1.

x	y
2	3
7	6

$m = \frac{3}{5}$



Point-Slope Form		Slope-Intercept Form	
$y = \frac{3}{5}(x-2) + 3$		$y = \frac{3}{5}x + \frac{9}{5}$	
y-int:	$(0, 9/5)$	x-int:	$(-3, 0)$
$y = \frac{3}{5}(0-2) + 3$ $-\frac{6}{5} + 3(\frac{5}{5})^1$ $9/5$		$0 = \frac{3}{5}x + \frac{9}{5}$ $-9 = 3x$ $x = -3$	

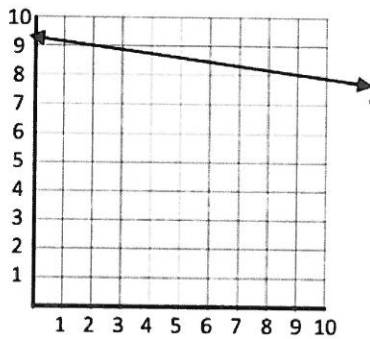
$-\frac{3}{5}x + 5y = \frac{9}{5}$
 $-3x + 5y = 9$

$3x - 5y = -9$

2.

x	y
2	9
9	8

$m = -\frac{1}{7}$

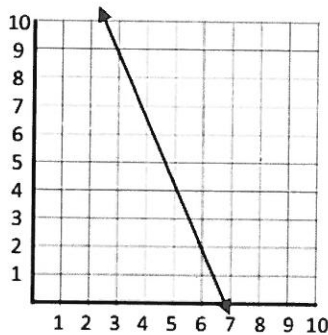


Point-Slope Form		Slope-Intercept Form	
$y = -\frac{1}{7}(x-2) + 9$		$y = -\frac{1}{7}x + \frac{65}{7}$	
y-int:	$(0, 65/7)$	x-int:	$(65, 0)$
$y = -\frac{1}{7}(0-2) + 9$ $\frac{2}{7} + 9$ $\frac{65}{7}$		$0 = -\frac{1}{7}x + \frac{65}{7}$ $x = 65$	

3.

x	y
3	9
6	2

$m = -\frac{7}{3}$



Point-Slope Form		Slope-Intercept Form	
$y = -\frac{7}{3}(x-6) + 2$		$y = -\frac{7}{3}x + 16$	
y-int:	$(0, 16)$	x-int:	$(48/7, 0)$
$y = -\frac{7}{3}(-6) + 2$ $14 + 2 = 16$		$0 = -\frac{7}{3}x + 16$ $\frac{7}{3}x = 16$ $x = \frac{48}{7}$	

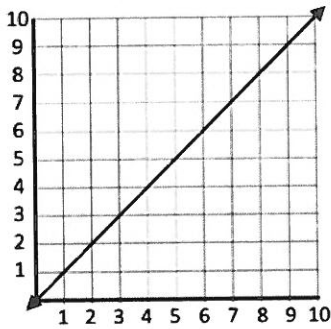
$-\frac{7}{3}x + y = 16$

$7x + 3y = 48$

4.

x	y
0	0
1	1
2	2

$m = 1$

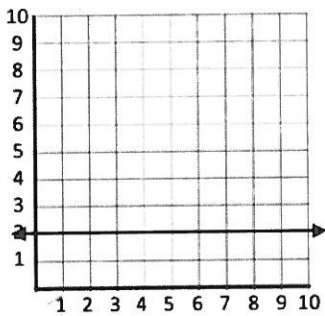


Point-Slope Form		Slope-Intercept Form	
$y = (x-1)+1$		$y = x$	
y-int:	$(0,0)$	x-int:	$(0,0)$
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5.

x	y
0	2
1	2
2	2

$m = 0$

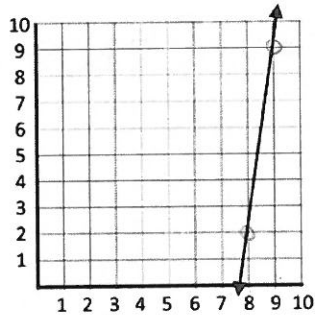


Point-Slope Form		Slope-Intercept Form	
n/a		$y = 2$	
y-int:	$(0,2)$	x-int:	none
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6.

x	y
8	2
9	9

$m = 7$

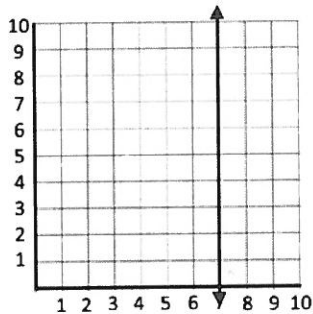


Point-Slope Form		Slope-Intercept Form	
$y = 7(x-8)+2$		$y = 7x - 54$	
y-int:	$(0, -54)$	x-int:	$(54/7, 0)$
$y = 7(-8)+2$ $-56+2$		$\frac{54}{7} = \frac{74}{7}$	

7.

x	y
7	0
7	1
7	2

$m =$
undefined

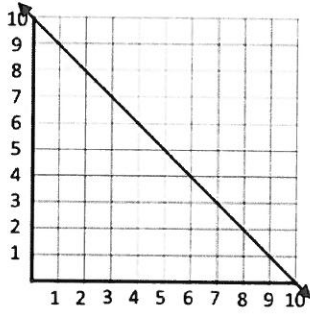


Point-Slope Form		Slope-Intercept Form	
n/a		$x = 7$	
y-int:	none	x-int:	$(7,0)$
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8.

x	y
0	10
10	0

$m = -1$

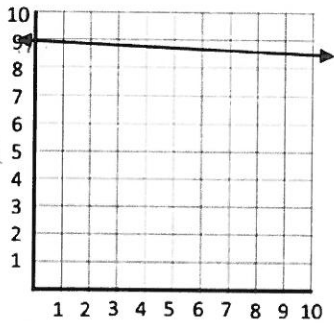


Point-Slope Form		Slope-Intercept Form	
$y = -(x - 10)$		$y = -x + 10$	
y-int:	(0, 10)	x-int:	(10, 0)
"		"	

9.

x	y
0	9
10	8.5

$m = -\frac{1}{20}$



Point-Slope Form		Slope-Intercept Form	
$y = -\frac{1}{20}(x - 20) + 8$		$y = -\frac{1}{20}x + 9$	
y-int:	(0, 9)	x-int:	(180, 0)
		$-9 = -\frac{1}{20}x$ $x = 180$	

10. $(-3, -3)$ $(-1, -2)$ $\frac{1}{2}$

Point-Slope Form		Slope-Intercept	
$y = \frac{1}{2}(x + 1) - 2$		$y = \frac{1}{2}x - \frac{3}{2}$	
y-int:	(0, -3/2)	x-int:	(3, 0)
$y = \frac{1}{2}(1) - 2$ $\frac{1}{2} - \frac{4}{2}$ $-3/2$		$\frac{3}{2} = \frac{1}{2}x$ $x = 3$	

12. $(-2, 5)$ $(4, -5)$ $-\frac{10}{6}$ $-\frac{5}{3}$

Point-Slope Form		Slope-Intercept	
$y = -\frac{5}{3}(x + 2) + 5$		$y = -\frac{5}{3}x + \frac{5}{3}$	
y-int:	(0, 5/3)	x-int:	(1, 0)
$-\frac{5}{3}(2) + 5$ $-\frac{10}{3} + \frac{15}{3}$		$\frac{5}{3}x = \frac{5}{3}$ $x = 1$	

11. $(1, 5)$ $(4, -5)$ $-\frac{10}{3}$

Point-Slope Form		Slope-Intercept	
$y = -\frac{10}{3}(x - 1) + 5$		$y = -\frac{10}{3}x + \frac{25}{3}$	
y-int:	(0, 25/3)	x-int:	(15/2, 0)
$\frac{10}{3} + 5$		$\frac{10}{3}x = \frac{25}{3}$	

13. ~~$(-2, 5)$ $(4, -5)$~~

Point-Slope Form		Slope-Intercept	
y-int:		x-int:	

