

Name

Key

**Slope Stations: Word Document**

\*Algebra 5.1-5.6 Review

1.)

**Direct Variation:**

$y = 1x$

$y = \frac{1}{4}x$

$y = -2x$

$y = 5x$

$y = -\frac{3}{2}x$

**Not a direct variation:**

$y = -\frac{1}{2}x + 7$

$y = -3$

$y = 3x - 1$

$y = -1x + 9$

$x = 7$

2.) **Point-Slope Form**

**Slope-Intercept Form**

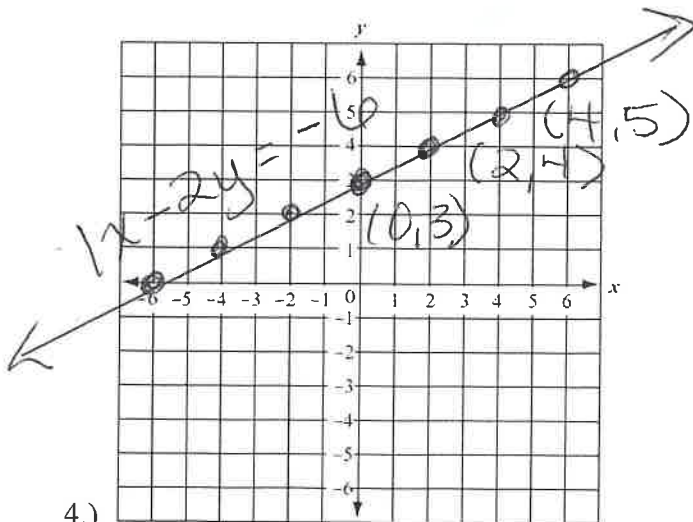
**Standard Form**

$y - 5 = 4(x + 3)$	$y = 4x + 17$	$4x - y = -17$
$y + 6 = -\frac{1}{3}(x + 2)$	$y = -\frac{1}{3}x - \frac{20}{3}$	$x + 3y = -20$
$y - 1 = \frac{3}{4}(x - 1)$	$y = \frac{3}{4}x + \frac{1}{4}$	$3x - 4y = -1$

3.) A) \$150 B)  $\frac{50}{3}$  C) She earns \$50 for every 3 haircuts.

D) (12, 0) E) She has to do 12 haircuts before she breaks even.

F) (0, -2, 00) G) Before cutting hair, she has \$200 worth of expenses.



4.)

Equation:  $x + 2y = -6$

5.) C

6.) A) Neither

B) Perpendicular

C) Parallel

D) Neither

work:  $y = \frac{1}{2}x + 3$   
 $-\frac{1}{2}x - \frac{1}{2}x$   
 $-2(-\frac{1}{2}x + y = 3)$

WORK:

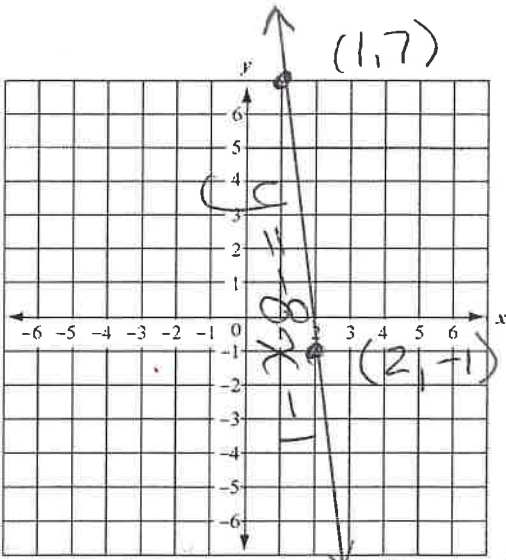
(1,7)

$y = -8x + b$

$7 = -8(1) + b$

$7 = -8 + b$   
 $+8 \quad +8$

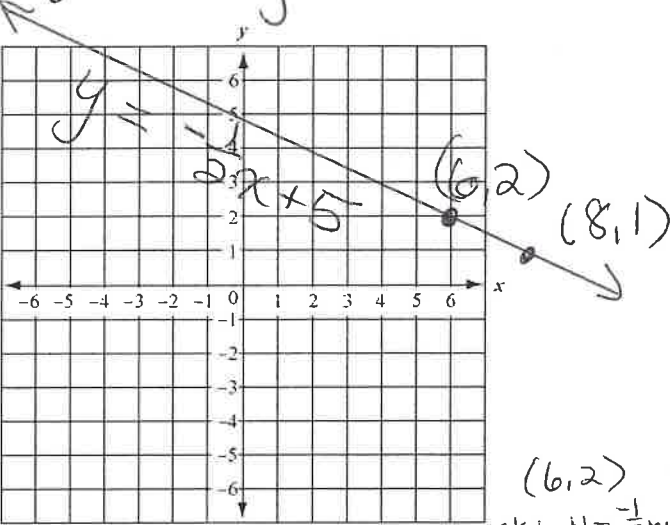
$15 = b$



7.)

Equation:  $y = -8x + 15$

9.)



$m = -\frac{1}{2}$

Equation:  $y = -\frac{1}{2}x + 5$

work:  $y = -\frac{1}{2}x + b$   
 $2 = -\frac{1}{2}(6) + b$   
 $2 = -3 + b$   
 $+3 \quad +3$   
 $5 = b$

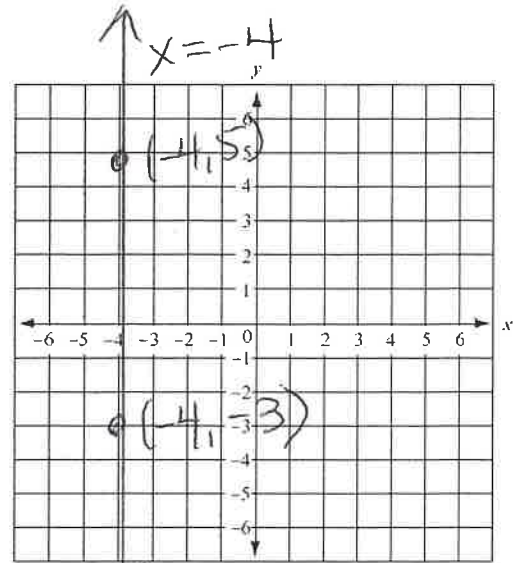
8.) A)  $y = 5x + 38$

B)  $9x + 4y = 120$

x-intercept:  $(13\frac{1}{3}, 0)$

y-intercept:  $(0, 30)$

C)  $x = -7$



$m = \text{undefined}$

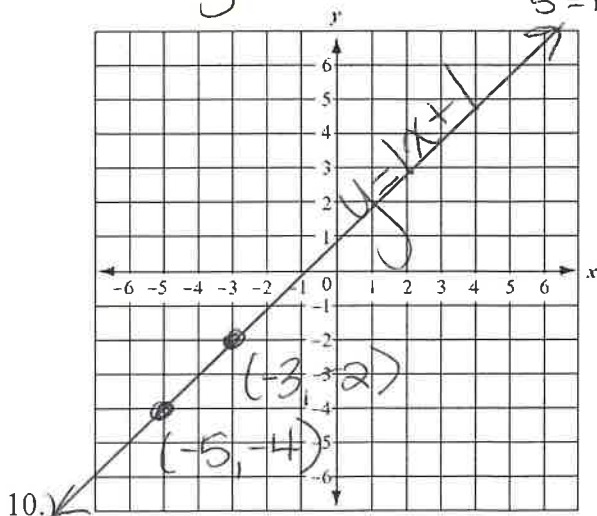
Equation:  $x = -4$

12.)  $m = \frac{3}{4}$

13.) ~~m~~  $B$

14.)  $m = \frac{4}{3}$

15.)  $m = \frac{8}{7}$



10.)

$m = \frac{2}{2} = 1$

Equation:  $y = 1x + 1$

work:  $y = 1x + b$  (-3, -2)  
 $-2 = 1(-3) + b$   
 $-2 = -3 + b$   
 $+3 \quad +3$   
 $1 = b$