Linear Equations: Conversion of Forms

Name KEY

Class Activity

Date _____ Period _____

Convert each equation to slope-intercept form. Use these equations to complete page 2.

1 / D — $4x + y = 6$

$-4x \quad -4x$

$y = -4x + 6$

2 / 14 — $y = -4x + 8$ ✓

3 / C — $4x + 5y = 20$

$-4x \quad -4x$

$\frac{5y}{5} = \frac{-4x + 20}{5}$

$y = -\frac{4}{5}x + 4$ ✓

4 / 8 — $4x + 5y = -30$

$-4x \quad -4x$

$\frac{5y}{5} = \frac{-4x - 30}{5}$

$y = -\frac{4}{5}x - 6$ ✓

5 / 18 — $y = -\frac{2}{3}x + 4$ ✓

6 / 3 — $y = -\frac{4}{5}x + 4$ ✓

7 / 11 — $2x - 3y = -18$

$-2x \quad -2x$

$\frac{-3y}{-3} = \frac{-2x - 18}{-3}$

$y = +\frac{2}{3}x + 6$

8 / 4 — $y = -\frac{4}{5}x - 6$ ✓

9 / 10 — $y = 2x + 3$ ✓

10 / 9 — $2x - y = -3$

$-2x \quad -2x$

$\frac{-y}{-1} = \frac{-2x - 3}{-1}$

$y = 2x + 3$ ✓

11 / 7 — $y = \frac{2}{3}x + 6$

12 / 16 — $2x - y = -7$

$+y \quad +y$

$2x = -7 + y$

$+7 \quad +7$

$2x + 7 = y$

13 / 15 — $y = \frac{2}{3}x - 2$

14 / 2 — $4x + y = 8$

$-4x \quad -4x$

$y = -4x + 8$

15 / 13 — $2x - 3y = 6$

$-2x \quad -2x$

$\frac{-3y}{-3} = \frac{-2x + 6}{-3}$

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

16 / 12 — $y = 2x + 7$

17 / 1 — $y = -4x + 6$

18 / 5 — $2x + 3y = 12$

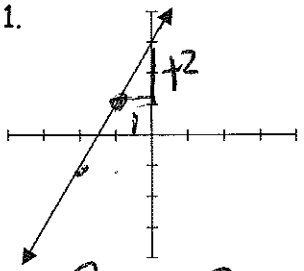
$-2x \quad -2x$

$\frac{3y}{3} = \frac{-2x + 12}{3}$

$y = -\frac{2}{3}x + 4$

For each of the following graphs, there are two corresponding equations. Fill in the number and the equation that matches the graph in **a) slope-intercept form, and b) standard form.**

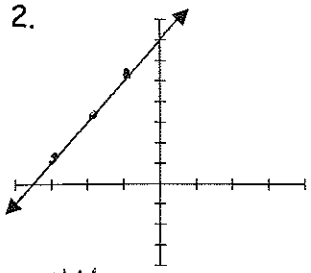
1.



a) #9 $y=2x+3$

b) #10 $+2x-y=-3$

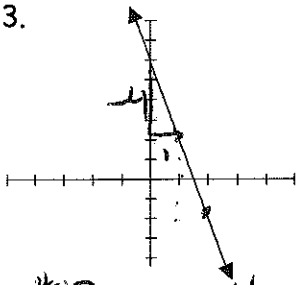
2.



a) #16 $y=2x+7$

b) #12 $2x-y=-7$

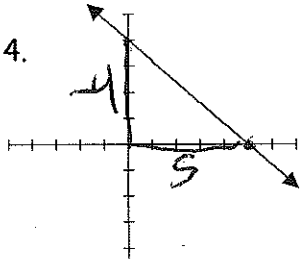
3.



a) #17 $y=-4x+6$

b) #1 $4x+y=6$

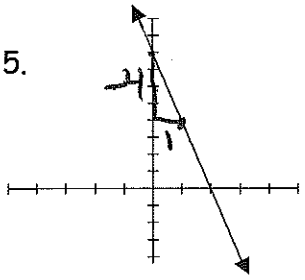
4.



a) #6 $y=\frac{-4}{5}x+4$

b) #3 $4x+5y=20$

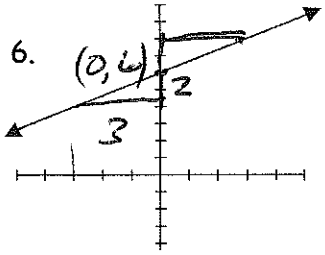
5.



a) #2 $y=-4x+8$

b) #14 $4x+y=8$

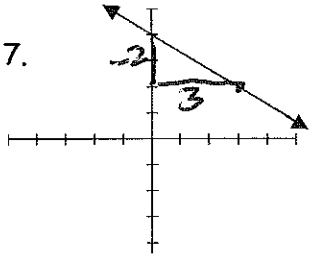
6.



a) #11 $y=\frac{2}{3}x+6$

b) #7 $2x-3y=-18$

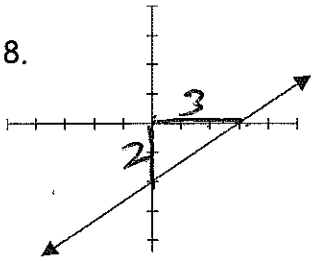
7.



a) #5 $y=\frac{-2}{3}x+4$

b) #18 $2x+3y=12$

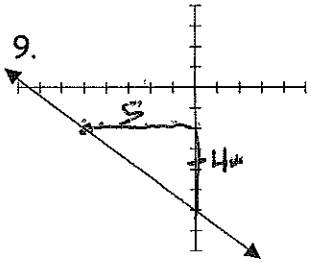
8.



a) #13 $y=\frac{2}{3}x-2$

b) #15 $2x-3y=6$

9.



a) #8 $y=\frac{-4}{5}x-6$

b) #4 $4x+5y=-30$