Math 8 Name Key ID: 1

Converting into Slope-Intercept Form

Date _____ Period _____

Write the slope-intercept form (y = mx+b) of the equation of each line.

1) $6x + 5y = 10$

$\frac{5y}{5} = \frac{-6x}{5} + \frac{10}{5}$

$y = -\frac{6}{5}x + 2$

2) $7x - 2y = 10$

$\frac{-2y}{-2} = \frac{-7x}{-2} + \frac{10}{-2}$

$y = \frac{7}{2}x - 5$

3) $x - 2y = 8$

$\frac{-2y}{-2} = \frac{-x}{-2} + \frac{8}{-2}$

$y = \frac{1}{2}x - 4$

4) $4x + y = 2$

$y = -4x + 2$

5) $2x - y = -2$

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

$y = 2x + 2$

6) $y + 3 = -7(x - 1)$

$y + 3 = -7(x) - 7(-1)$

$y + 3 = -7x + 7$

$y = -7x + 7 - 3$

$y = -7x + 4$

7) $y = 3(x - 3)$

$y = 3(x) + 3(-3)$

$y = 3x - 9$

8) $y - 5 = -(x + 2)$

$y - 5 = -1(x) - 1(2)$

$y - 5 = -x - 2 + 5$

$y = -x + 3$

9) $y + 4 = -\frac{5}{4}(x + 1)$

$y + 4 = -\frac{5}{4}(x) - \frac{5}{4}(1)$

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

$y = -\frac{5}{4}x - \frac{5}{4} - \frac{4}{1} \times \frac{4}{4}$

$y = -\frac{5}{4}x - \frac{5}{4} - \frac{16}{4}$

$y = -\frac{5}{4}x - \frac{21}{4}$

10) $y - 3 = -\frac{6}{5}(x + 5)$

$y - 3 = -\frac{6}{5}(x) - \frac{6}{5}(5)$

$y - 3 = -\frac{6}{5}x - 6 + 3$

$y = -\frac{6}{5}x - 3$