

Name:

Linear and Exponential Functions | 4.7

Go

Topic: Slope-Intercept Form

Rewrite the equations in slope-intercept form. $y = mx + b$

14.
$$\begin{array}{rcl} 2y + 10 & = & 6x + 12 \\ -10 & & -10 \\ \hline 2y & = & 6x - 2 \\ \frac{2y}{2} & = & \frac{6x}{2} \\ \hline y & = & 3x - 1 \end{array}$$

15.
$$\begin{array}{rcl} 5x + y & = & 7x + 4 \\ -5x & & -5x \\ \hline y & = & 2x + 4 \end{array}$$

16.
$$\begin{array}{rcl} (y - 13) & = & \frac{1}{2}(8x - 14) \\ y - 13 & = & 4x - 7 \\ +13 & & +13 \\ \hline y & = & 4x + 6 \end{array}$$

17.
$$\begin{array}{rcl} (y + 11) & = & -7(x - 2) \\ y + 11 & = & -7x + 14 \\ -11 & & -11 \\ \hline y & = & -7x + 3 \end{array}$$

18.
$$\begin{array}{rcl} (y - 5) & = & 3(x + 2) \\ y - 5 & = & 3x + 6 \\ +5 & & +5 \\ \hline y & = & 3x + 11 \end{array}$$

19.
$$\begin{array}{rcl} 3(2x - y) & = & 9x + 12 \\ 6x - 3y & = & 9x + 12 \\ -6x & & -6x \\ \hline -3y & = & 3x + 12 \\ \frac{-3y}{-3} & = & \frac{3x}{-3} + \frac{12}{-3} \\ y & = & -x - 4 \end{array}$$

20.
$$\begin{array}{rcl} y - 2 & = & \frac{1}{5}(10x - 25) \\ y - 2 & = & 2x - 5 \\ +2 & & +2 \\ \hline y & = & 2x - 3 \end{array}$$

21.
$$\begin{array}{rcl} y + 13 & = & -1(x + 3) \\ y + 13 & = & -1x - 3 \\ -13 & & -13 \\ \hline y & = & -x - 16 \\ y & = & -x - 16 \end{array}$$

22.
$$\begin{array}{rcl} y + 1 & = & \frac{3}{4}(x + 3) \\ y + 1 & = & \frac{3}{4}x + \frac{9}{4} \\ -1 & & -\frac{3}{4} \\ \hline y & = & \frac{3}{4}x + \frac{5}{4} \end{array}$$

Need Help? Check out these related videos:

Equations in slope-intercept form:

<http://www.khanacademy.org/math/algebra/linear-equations-and-inequalities/v/linear-equations-in-slope-intercept-form>

Equations in point-slope form:

<http://www.khanacademy.org/math/algebra/linear-equations-and-inequalities/v/linear-equations-in-point-slope-form>