

# Standard Form of a Linear Equation

Convert each equation from slope-intercept form to standard form.

1)  $y = -\frac{2}{5}x$

2)  $x = -5$

3)  $y = 2x - 3$

4)  $y = -2x + 1$

5)  $y = -6$

6)  $y = -x - 3$

7)  $y = -3x + 2$

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

**Write each equation in STANDARD FORM. (Hint: Write in slope-intercept form, then convert to standard form.)**

9) Slope =  $\frac{3}{5}$ , y-intercept = 5

10) Slope = 1, y-intercept = -3

11) Slope =  $-\frac{3}{5}$ , y-intercept = -3

12) Slope =  $\frac{5}{4}$ , y-intercept = 2

$$13) \text{ Slope} = -\frac{3}{5}, \text{ y-intercept} = 1$$

$$14) \text{ Slope} = -8, \text{ y-intercept} = 5$$

$$15) \text{ Slope} = \frac{7}{2}, \text{ y-intercept} = 3$$

$$16) \text{ Slope} = -5, \text{ y-intercept} = 5$$

**Convert each equation to STANDARD FORM.**

$$17) y - 5 = -3(x + 2)$$

$$18) y + 1 = \frac{4}{5}(x - 5)$$

$$19) 0 = x - 4$$

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

$$21) y - 4 = \frac{1}{3}(x + 3)$$

$$22) y + 5 = 3(x + 3)$$

$$23) y - 3 = -2(x + 2)$$

$$24) y - 1 = \frac{5}{3}(x - 3)$$

**Write each equation in STANDARD FORM. (Hint: Write in point-slope form first, then convert to STANDARD FORM.)**

25) through:  $(5, 0)$ , slope =  $-1$

26) through:  $(2, -5)$ , slope =  $-4$

27) through:  $(-3, -4)$ , slope =  $-\frac{1}{3}$

28) through:  $(3, 0)$ , slope =  $-\frac{2}{3}$

29) through:  $(-5, 3)$ , slope =  $-\frac{1}{5}$

30) through:  $(-1, -3)$ , slope =  $4$

31) through:  $(1, 4)$ , slope =  $1$

32) through:  $(-5, -5)$ , slope =  $\frac{9}{8}$

33) through:  $(0, -4)$  and  $(2, 5)$

34) through:  $(0, 3)$  and  $(-1, 4)$

35) through:  $(0, 1)$  and  $(-2, -4)$

36) through:  $(-1, -3)$  and  $(0, 2)$

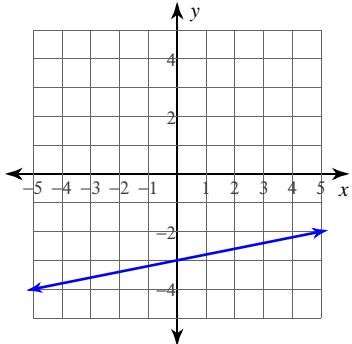
37) through:  $(-3, -2)$  and  $(2, 3)$

38) through:  $(-4, 3)$  and  $(-1, -1)$

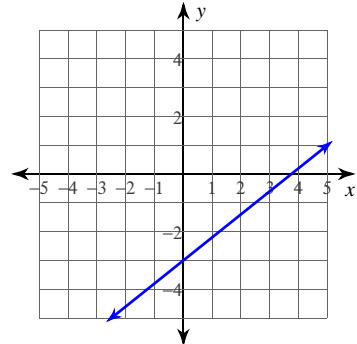
39) through:  $(3, -2)$  and  $(0, 3)$

40) through:  $(4, 2)$  and  $(4, -2)$

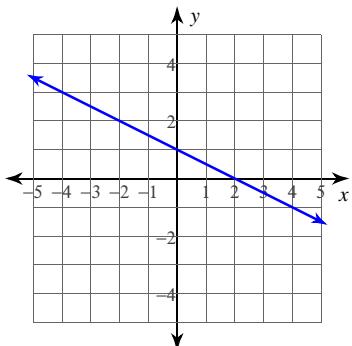
41)



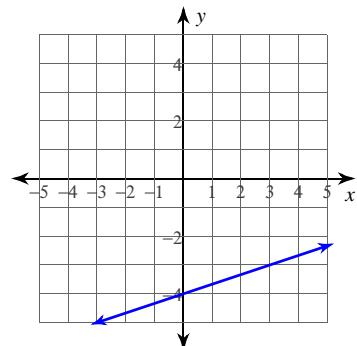
42)



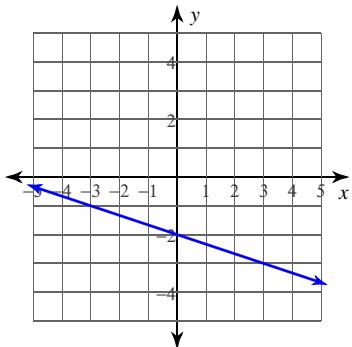
43)



44)



45)



46)

