Practice 10.6

Name_____

Determine whether the given point lies on the line.

1) $(-3, 8);\ y - 11 = x$

2) $(0, 4);\ y = \frac{1}{2}(x + 6) + 3$
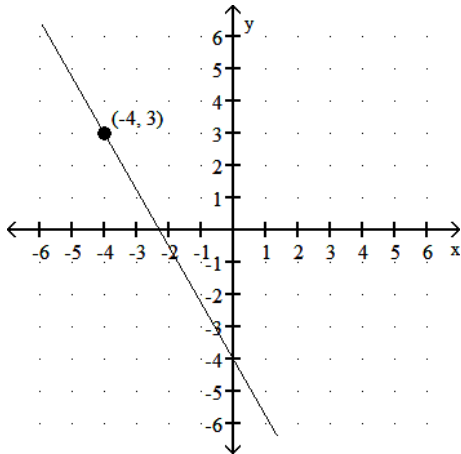
Use the labeled point to write the point-slope form for the line.

3)

Write the point-slope form in slope-intercept form.

4) $y - 6 = -9(x + 5)$

5) $y + 2 = \frac{3}{5}(x - 5)$

Find the slope-intercept form for the line satisfying the conditions.

6) Slope - 6, passing through $(4, 4)$

7) Passing through $(-2, -6)$ and $(8, 1)$

8) x-intercept 7, y-intercept -8

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9) Find the slope-intercept form for the line satisfying the conditions.

Parallel to y = 2x - 9, passing through (1, -5)

10) Perpendicular to $y = \frac{1}{3}x + 19$, passing through the point (-5, -6)

Solve the problem.

11)
A gas station sells 4820 gallons of regular unleaded gasoline on a day when they charge $4.35 per gallon, whereas they sell 3953 gallons on a day that they charge $4.40 per gallon. Find a linear function that expresses gallons sold as a function of price.

1) Yes
2) No
3) $y - 3 = -\dfrac{7}{4}(x + 4)$
4) $y = -9x - 39$
5) $y = \dfrac{3}{5}x - 5$
6) $y = -6x + 28$
7) $y = \dfrac{7}{10}x - \dfrac{23}{5}$
8) $y = \dfrac{8}{7}x - 8$
9) $y = 2x - 7$
10) $y = -3x - 21$
11) $y = -17,340x + 80,249$