NAME _____ DATE _____ PERIOD _____

Lesson 6 Homework Practice

Write Linear Equations

Write an equation in point-slope form and slope-intercept form for each line.

1. passes through (−5, 6), slope = 3

$y - 6 = 3(x + 5)$

$y = 3x + 21$

2. passes through (6, −6), slope = 5

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

$y = 5x - 36$

3. passes through (0, 1) and (2, 5)

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

$y = 2x + 1$

4. passes through (−5, 9) and (1, 3)

$y - 9 = -1(x + 5)$

$y = -x + 4$

5. passes through (1, −1) and (2, 0)

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

$y = x - 2$

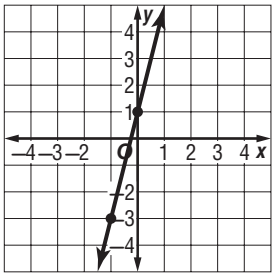
6. passes through (−3, −5), slope = 2

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

$y = 2x + 1$

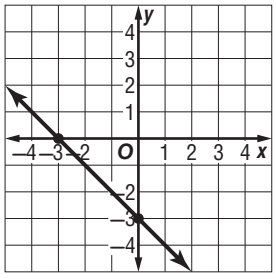
Write the point-slope form of an equation for each line graphed.

7.



$y - 1 = 4(x)$

8.



$y = -1(x + 3)$

9. **TEMPERATURE** The table shows the temperature at certain hours. Assuming the temperature change is linear, write an equation in point-slope form to represent the temperature y at x hour.

$y - 35 = 4(x - 1)$

Hour	Temperature (°F)
1	35
2	39

10. **SPEED** After 2 hours, a car travels 70 miles. After 2.25 hours in the same trip, the car travels 78.75 miles. Write an equation in point-slope form to represent the distance y of the car after x hours.

$y - 70 = 35(x - 2)$