## NAME

DATE
PER.
WRITING EQUATIONS OF LINES
Write the equation of each line described, in slope-intercept form.

| 1. | Passes through ( $3,-5$ ) and (6, 1) |
| :---: | :---: |
| 2. | Slope of 0 and passes through (7,4) |
| 3. | Undefined slope and passes through (-4, -7) |
|  | Slope of $-\frac{5}{2}$ and pass through ( $-4,-11$ ) |
| 5. | Slope of $\frac{2}{3}$ and $x$-intercept of -3 |
| 6. | $y$-intercept of -4 and $x$-intercept of 7 |
| 7. | Passes through the point $(7,12)$ and y varies directly with x |

8. 



What is the equation of the line shown in slope-intercept form? $\qquad$
What is the constant rate of change? $\qquad$
What is the y-intercept? $\qquad$
As the $x$-value increases by $\qquad$ , the $y$-value increases or decreases by $\qquad$ .

Does this represent a direct variation? Explain.

Write the equation of a line parallel to the given graph and passes through ( $-1,1$ ).

Write the equation of a line perpendicular to the given graph and passes through (6, 9).

Answers in random order: $y=2 x-11, x=-2, y=-3 x+9, y=\frac{2}{3} x+2, x=-4, y=-\frac{5}{2} x-21,-3$ $y=\frac{1}{3} x+7, y=4, y=-3 x-2, y=\frac{4}{7} x-4,(0,9), 3, \quad 1, y=\frac{12}{7} x$

