## WRITING EQUATIONS OF LINES

1. Given the linear equation: $4 x-6 y=12$

Is the original equation in slope-intercept form or standard form?
Does the graph of this line cross the $y$-axis above or below the $x$-axis?
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 equation represent a direct variation? Explain.

Write the equation of a line parallel to the given equation and passes through (3, 8).

Write the equation of a line perpendicular to the given equation and passes through (6, -13).

Write the equation of each line described, in slope-intercept form.
2.

3. Slope of $-\frac{1}{2}$ and passes through $(-4,1)$
4. Vertical and horizontal lines through $(-2,8)$
5. $y$-intercept of -2 and $x$-intercept of 6
6. The distance required to stop a car varies directly to its speed. If 250 feet are required to stop a car traveling 60 miles per hour, how many feet are required to stop a car traveling 25 miles per hour in a school zone?

