

6-3 Equation of Lines in Slope intercept form

Name: _____ Time> Start: _____ Finish: _____ Total Time = _____

Remember that $y = mx + b$ is the equation of a line in slope-intercept form.

A helpful equation to remember is that $y - y_1 = m(x - x_1)$.

- _____ 1. Find the equation of the line, in slope intercept form, that goes through the point (2, 8) and has a slope of -3.

- _____ 2. Find the equation of the line, in slope intercept form, that goes through the point (-1, -2) and has a slope of $\frac{1}{2}$.

- _____ 3. Find the equation of the line, in slope intercept form, that goes through the point (2, 8) and (3, 10).

- _____ 4. Find the equation of the line, in slope intercept form, that goes through the point (-1, -8) and (-3, -12).

- _____ 5. Find the equation of the line, in slope intercept form, that goes through the point (0, 4) and has a slope of -5.

- _____ 6. Find the equation of the line, in slope intercept form, that goes through the point (0, 8) and (2, 10).

- _____ 7. Give the equation of the line, in slope intercept form, that is parallel to $y = 8x - 5$ and passes through the point (1, 20).

- _____ 8. Give the equation of the line, in slope intercept form, that is parallel to $y = 2x - 1$ and passes through the point (3, 9).

- _____ 9. Give the equation of the line, in slope intercept form, that is perpendicular to $y = 2x - 5$ and passes through the point (2, 8).

- _____ 10. Give the equation of the line, in slope intercept form, that is perpendicular to $y = 4x - 5$ and passes through the point (4, 12).