3.5 Write and Graph Equations of Lines

**Slope-intercept form of a line**

\[ y = mx + b \]

- \( m = \) ____________
- \( b = \) ____________

**Graph in Slope-Intercept Form**

- Plot the ____________
- Move from the ____________ the slope to find a couple more ____________
- ____________ the points with a ____________

**Graph**

\[ y = -2x \]

\[ y = x - 3 \]

**Write Equations of Lines**

To write equations of lines using______________

Find the ____________

Find the ____________

- It is given or, Plug the ____________ and a ____________ into ____________ and solve for ______

Write the ________________ of the line by plugging in ____ and ____ into ____________

Write an equation of the line in the graph
Write an equation of the line that passes through (-2, 5) and (1, 2)

Write an equation of the line that passes through (1, 5) and is parallel to the line with the equation $y = 3x - 5$.

**Standard form**

$Ax + By = C$

$A$, $B$, and $C$ are ______________

To graph

- Find the $x$- and $y$-______________ by letting the other ______________ = 0
- Plot the two ______________
- Draw a line through the ______________

Graph $2x + 5y = 10$

Assignment: 184 #2-12 even, 16-26 even, 30-36 even, 40, 44, 46, 60, 62, 68-74 even = 25 total