6-3 graphing Linear Relations

formula $\longrightarrow y = mx + b$

slope ↑   ↑ y-intercept

$y = \underline{5}\, x - 1$
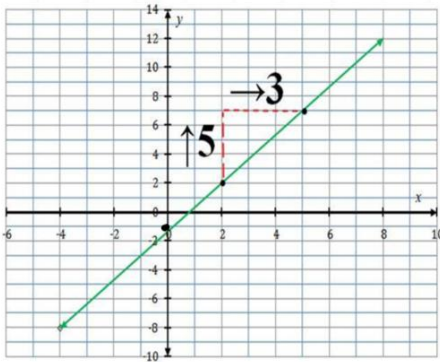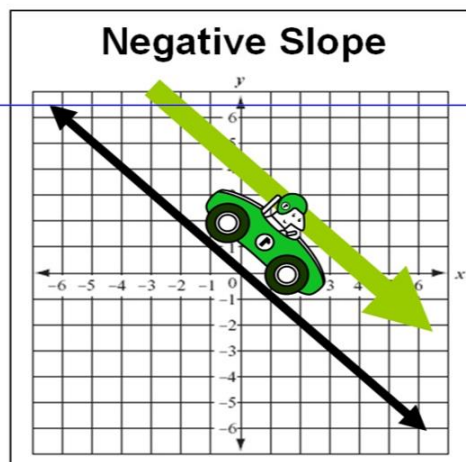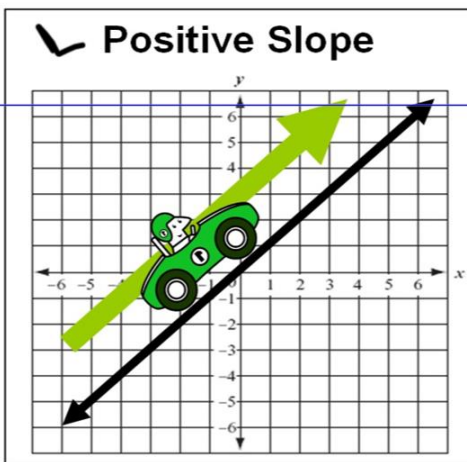

slope $= \dfrac{rise \updownarrow}{run \rightarrow}$

a positive slope goes <u>UP</u> and to the right.

a negative slope goes <u>DOWN</u> and to the right.

An equation whose graph is a <u>straight</u> <u>line</u> is called a <u>linear equation</u>.

Changing to slope-intercept form

$$y = mx + b \quad \underline{OR} \quad mx + b = y$$

1) The "y" always stays.

2) Move the term that is on the same side as the "y".