### 6.1 Slope of a Line

* The slope, or $\qquad$ of a line is given by:
$\mathrm{m}=$ $\qquad$ or m = $\qquad$
* Positive slope $\qquad$ from left to right while negative slope $\qquad$ from left to right.
ex.

$\mathrm{m}_{\mathrm{AB}}=$
$\mathrm{m}_{\mathrm{CD}}=$
* a horizontal line has a slope =

Ex. Draw a line segment that has the following slopes
a) $m=3$
b) $m=-4 / 5$


* Regardless of the points used to calculate the slope of a line, the slope will always be the same.

Slope: If a line passes through $A\left(x_{1}, y_{1}\right)$ and $B\left(x_{2}, y_{2}\right)$, the equation for slope is

$$
m_{A B}=
$$


ex. Find the slope of the line that passes through $D(-3,-2)$ and $E(10,5)$

