Name

3.6

Alg I

Model Direct Variation

I can graph direct variation equations.

Ch. 3 Quiz

Direct variation: When $y = ax$ and $a \neq 0$.

Constant of Variation: The nonzero number a in $y = ax$

Example 1:

1) $-x + y = 1$
$+x \quad +x$
$y = x + 1$ NOT Direct Variation

2) $2x + y = 0$
$-2x \quad -2x$
$y = \boxed{-2}x$ Direct Variation

3) $4x - 5y = 0$
$-4x \quad -4x$
$\frac{-5y}{-5} = \frac{-4x}{-5}$
$y = \boxed{\frac{4}{5}}x$ Direct Variation

* Direct variation equations $y = ax$, is a linear equation in slope-intercept form $y = mx + b$, where $m = a$ and $b = 0$. So, the slope is a, and it passes through the origin.

Example 2:

4) $y = 2x$

$m = \frac{2}{1}$