

Building Equations from Tables

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⊗ A 2-step equation has this format : $y = mx + b$
ex. $y = 3x + 2$

Overall Method :

1. Find "x" change and "y" change
2. calculate $m = \frac{y \text{ change}}{x \text{ change}}$
3. Find "b" value by trial and error

Ex. Determine an equation for each table of values :

a)

| x | y |
|---|----|
| 0 | 1 |
| 1 | 5 |
| 2 | 9 |
| 3 | 13 |
| 4 | 17 |

+1 +4

$$m = \frac{y \text{ change}}{x \text{ change}} = \frac{4}{1} = 4$$

$$y = mx + b$$

$$y = 4x + 1$$

b)

| x | y |
|----|-----|
| 2 | -5 |
| 5 | -14 |
| 8 | -23 |
| 11 | -32 |

+3 + -9
-9

$$m = \frac{-9}{3} = -3$$

$$y = -3x + 1$$