

8-2 Solving Equations

SWBAT: SOLVE Linear equations in 2 VARIABLES.

$$y = 21 - 0.01x$$

$$18 = 21 - 0.01(300)$$

$$\underset{x}{(300, 18)} \text{ True}$$

$$\underset{x}{(500, 15)} \text{ False}$$

Rule $\rightarrow y = 3x + 6$

INPUT	OUTPUT	
x	y	(x, y)
-3	-3	-3, -3
0	6	0, 6
2	12	2, 12

$$3x + 5y = 30$$

UNDO
ADD: $5y + (3x - 3x) = 30 - 3x$

UNDO
MULT: $\frac{5}{5}y = \frac{30}{5} - \frac{3x}{5}$

$$y = 6 - \frac{3}{5}x$$

$$y = 6 - .6x$$

$$4x - \frac{2}{3}y = 6$$

$$3 \cdot 4x - 3 \cdot \frac{2}{3}y = 3 \cdot 6$$

$$12x - 2y = 18$$

$$-2y + 12x = 18 - 12x$$

UNDO
MULT: $\frac{-2}{-2}y = \frac{18}{-2} + \frac{12x}{-2}$

$$y = -9 + 6x$$

x	y
1	
2	
5	

$$\frac{1}{2}y + \frac{4}{5}x = 15$$

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