
January 4, 2012

Get out your homework...

1/4 - Writing equations in slope-intercept form

Work with your partner and figure out:

What can you do to an equation and have it remain equal?

1. Add the same number to both sides
2. Subtract the same number from both sides
3. Multiply both sides by the same number
4. Divide both sides by the same number
5. Change the signs of both sides
6. Switch sides
7. Change the order of everything on one side

Solve each equation for y (get it in slope-intercept form)

$$\frac{-2y}{-2} = \frac{x+2}{-2}$$

$$y = -\frac{1}{2}x - 1$$

$$\begin{aligned} -y + \cancel{4} &= -x \\ \quad \quad \quad \color{red}{-4} \quad \color{red}{-4} \\ +y &= +x + 4 \\ y &= x + 4 \end{aligned}$$

$$\begin{aligned} \overset{\text{last}}{\downarrow} \\ \color{green}{5}y - 4x &= -10 \\ \quad \quad \quad \color{magenta}{+4x} \quad \color{magenta}{+4x} \\ \color{green}{5}y &= \color{green}{\cancel{4x}} - 10 \\ \color{magenta}{\underline{5}} &= \color{magenta}{\underline{5}} \\ y &= \frac{4}{5}x - 2 \end{aligned}$$

$$0 = -4 + x + 4y$$

-4y -4y

$$\frac{-4y}{-4} = \frac{-4 + x}{-4}$$

$$y = 1 - \frac{1}{4}x$$

$$y = -\frac{1}{4}x + 1$$

$$-3 = -4x - 3y$$

+3y +3y

$$\frac{3y - 3}{+3} = \frac{-4x}{+3}$$

$$\frac{3y}{3} = \frac{-4x + 3}{3}$$

$$y = \frac{-4}{3}x + 1$$

$$-5 = 2x + 3y$$

$$-3y$$

$$-3y$$

$$-3y - 5 = 2x$$

$$+5$$

$$+5$$

$$\frac{-3y}{-3} = \frac{2x+5}{-3}$$

$$y = -\frac{2}{3}x - \frac{5}{3}$$

$$4x - 2y + 1 = 0$$

$$+2y$$

$$+2y$$

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

$$2x + \frac{1}{2} = y$$

$$y = 2x + \frac{1}{2}$$

Homework

Yellow Worksheet WSG

Due Thurs.