

$$\left(2x^4y^3\right)^3$$

$$3x^{12}y^9 = -8x^{12}y^9$$

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

③ $3x^{-1}y^2 = \frac{3y^2}{x}$

④ $(x-8)^2 = (x-8)(x-8)$

$$\frac{x^2-8x-}{x^2-16x}$$

$$x^{-2} x^5 = \frac{-6 x^5}{x^2} = -6x^3$$

⑦

$$(3x-2)(4x-3)$$
$$12x^2 - 9x - 8x + 6$$
$$12x^2 - 17x + 6$$

$$\left(\frac{x^8}{y}\right)^2 = \cancel{y^8} \frac{x^{16}}{y^8} = \frac{x^{16}}{y^8}$$

⑧

$$x^2 - 4x - 60$$
$$(x+6)(x-10)$$

Writing Linear Equations in Slope-Intercept Form

CHAPTER 5 SECTION 1

Slope-Intercept Form



- Slope-Intercept form:

$$\mathbf{y=mx+b}$$

- Where m=slope and b=y-intercept

Writing Equation of a Line given Slope and Y-intercept



- If you are given slope and y-intercept...plug them into the equation!
 - Example: $m=2$ and $y\text{-int}=3$
 - ✖ Then: $y = 2x + 3$

Examples:

- 1. $m=-4$ $y\text{-int}=3$

$$y = mx + b$$
$$y = -4x + 3$$

- 2. $m=1/2$ $y\text{-int}=-5$

$$y = mx + b$$
$$y = \frac{1}{2}x - 5$$

Examples:

- 3. $m=5/6$ y-int: $(0, -2)$

$$y = mx + b$$
$$y = \frac{5}{6}x - 2$$

- 4. $m=0$ y-int: $(0, 4)$

$$y = mx + b$$
$$y = 0x + 4$$
$$y = 4$$

Class Work



- Complete Worksheet 5.1

Writing an Equation of a Line from a Graph



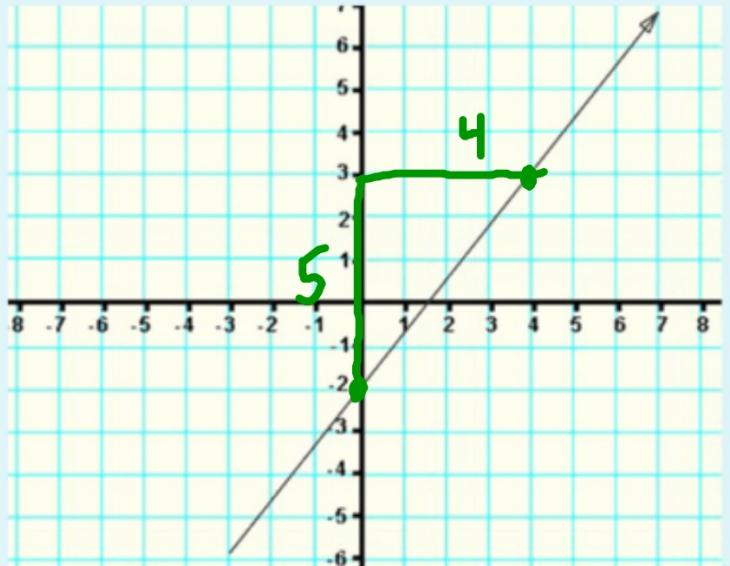
- Use the graph to find the slope and y-intercept.
- Plug the slope and y-intercept into the equation

Example:



- Find the slope
 - $m = \frac{5}{4}$
- Find the y-intercept
 - $b = (0, -2)$
- Equation:

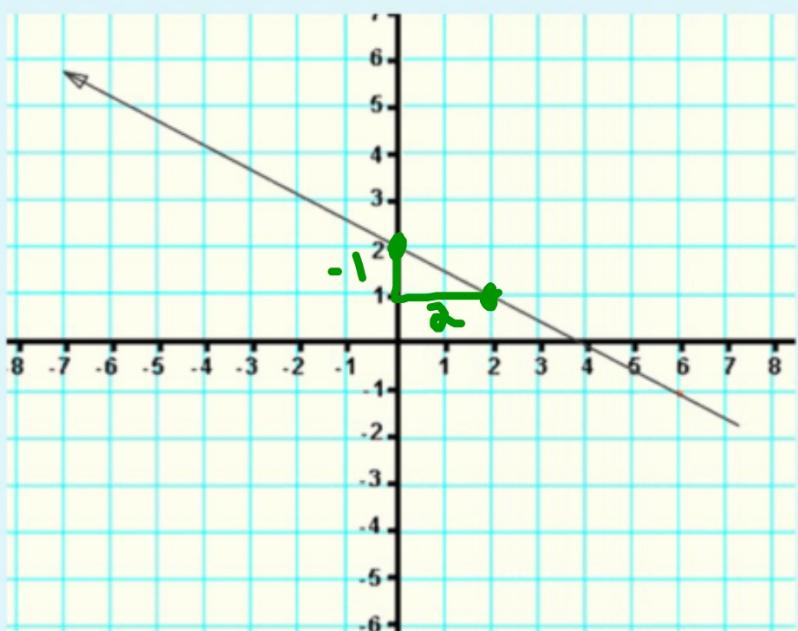
$$y = \frac{5}{4}x - 2$$



Example:



- Find the slope
 - $m = -\frac{1}{2}$
- Find the y-intercept
 - $b = (0, 2)$
- Equation:
 - $y = -\frac{1}{2}x + 2$

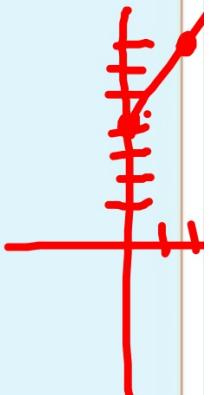


Classwork

○ 26/27

- Worksheet 5.1 finish
- Blue book- Page 147 # 1-4, 6
- Pg 276 # 1-11, 26-27

$$\begin{aligned} & \frac{q-11}{1.50x \text{ # hrs.} + 4} = \text{Cost} \\ & C = 1.50 \cdot h + 4 \rightarrow Y = \frac{3}{2}X + 4 \\ & Y = m \cdot x + b \quad | \cdot \frac{1}{2} \quad m = \frac{3}{2}, (0,4) \end{aligned}$$



Homework



- Pg 276 # 12-23, 28, 29