Slide 1

Warmup 9/ $\left(\dfrac{5 + 10 - 3 \times 6 - 8}{+400 - 66 \div 10}\right) \cdot 0 + 26$

1. Solve x + 6 − 3(2x+7) − 3x = -9

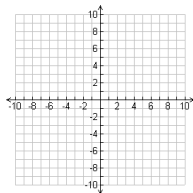2. Solve $4x - 5y = 20$ for y. *What form did you just put the equation in?*

Slide 2

Important Announcement

- There will be no assessment on standard form this week!
- So the slope-intercept form quiz is the last quiz!
- We will spend Tuesday and Wednesday reviewing what we learned this nine weeks
- The Benchmark is Thursday (probably)

Slide 3

Find the x and y intercepts from a linear equation in standard form. Then graph the function.

3/5x + 1/3y = 3

The x-intercept is 5; (5, 0)
The y-intercept is 9; (0, 9)

Slide 4

The school sells pens for $2.00 and notebooks for $3.00. You have $60 to spend on notebooks and pens.

A. **Write an equation for this situation.**
B. **Find the intercepts.**
C. **Sketch a graph for the function**

Slide 5

The school sells pens for $2.00 and notebooks for $3.00. The equation 2x + 3y = 60 describes the number of pens x and notebooks y that you can buy for $60.

Graph the function and find its intercepts.

School Store Purchases

x-intercept: 30; y-intercept: 20

Slide 6

The school sells pens for $2.00 and notebooks for $3.00. The equation 2x + 3y = 60 describes the number of pens x and notebooks y that you can buy for $60.
What does each intercept represent?

School Store Purchases

x-intercept: 30. This is the number of pens that can be purchased if no notebooks are purchased.

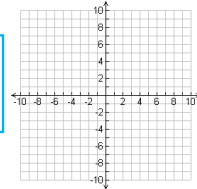y-intercept: 20. This is the number of notebooks that can be purchased if no pens are purchased.

Check Homework

Find the x and y intercepts from a linear equation in standard form. Then graph the function.

$9x - 18y = 36$

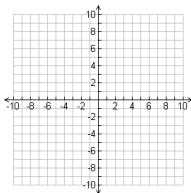The x-intercept is 4; (4, 0)
The y-intercept is -2; (0, -2)

Early finishers: try to find MORE points that work besides the intercepts!!!

Find the x and y intercepts from a linear equation in standard form. Then graph the function.
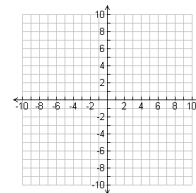
$4y - 2x = 0$

The x-intercept is 0; (0, 0)
The y-intercept is 0; (0, 0)

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1. Change it into standard form
2. Find the intercepts
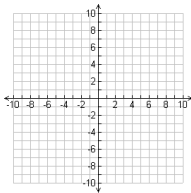3. Graph the function.

$-2y = -3x + 6$

The x-intercept is 2; (2, 0)
The y-intercept is -3; (0, -3)

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1. Change it into standard form
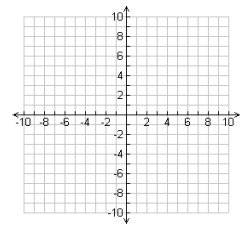2. Find the intercepts
3. Graph the function.

$3x - 5 + y = 2y - 4$

The x-intercept is 1/3; (1/3, 0)
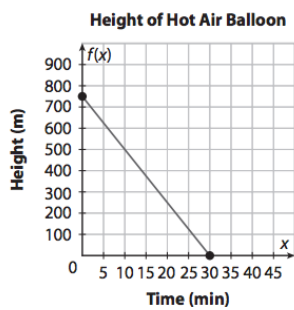The y-intercept is -1; (0, -1)

Graph Each.

- $y = 4x + 5$
- $y = 4$
- $4x + y = 8$

Interpret the intercepts.

Height of Hot Air Balloon

Homework

- Review: Equations and Inequalities