



Pre-Algebra

EXTRA HELP TODAY

To do now:

- ⇒ Have your homework on your desk (Handout Proportions)
- ⇒ Complete Warm Up

Agenda:

- ⇒ Proportions-Similar Figures

Warm Up:

- ⇒ If a map shows the scale to be, 1 inch = 22 miles, and the measured distance on the map is $2\frac{3}{4}$ inches. How far is the actual distance? Show using Proportions and Cross Products!

Homework:

- ⇒ Similar Figures Handout

Feb 3-7:52 PM

If a map shows the scale to be, 1 inch = 22 miles, and the measured distance on the map is $2\frac{3}{4}$ inches. How far is the actual distance? Show using Proportions and Cross Products!

$$\begin{array}{r}
 \frac{1''}{22 \text{ MI}} \\
 \hline
 \end{array}
 \quad \times \quad
 \begin{array}{r}
 \frac{2\frac{3}{4}''}{x \text{ MI}} \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 \frac{1}{4} \cdot \frac{22}{1} = \frac{22}{4} \\
 = 60.5 \\
 \text{MI.}
 \end{array}$$

$$(2\frac{3}{4})(22) = 1x$$

Feb 8-8:46 PM

SIMILAR vs. CONGRUENT

(ANGLES ARE EQUAL) vs. (ANGLES AND SIDES ARE EQUAL)

(SIDES ARE PROPORTIONAL)

Small Δ $\frac{2}{4} = \frac{3}{x}$ Big Δ

Feb 9-7:53 AM

If a map shows the scale to be, 1 inch = 22 miles, and the measured distance on the map is $2\frac{3}{4}$ inches. How far is the actual distance? Show using Proportions and Cross Products!

$$\frac{1 \text{ IN}}{22 \text{ MI}} \neq \frac{2\frac{3}{4} \text{ IN}}{x \text{ MI}}$$

$$22(2\frac{3}{4}) = 1x$$

$$22 \frac{22}{1} \left(\frac{11}{4}\right) = x$$

$$\frac{242}{4} = x$$

Feb 8-8:46 PM

SIMILAR FIGURES

ANGLES ARE EQUAL
 SIDES ARE PROPORTIONAL

$$\frac{18 \text{ BT}}{6 \text{ ST}} = \frac{X \text{ ST}}{7 \text{ ST}}$$

CONGRUENT

SAME SIDES
 SAME ANGLES

$$6x = 18(7)$$

$$\frac{6x}{6} = \frac{126}{6}$$

$$x = 21$$

Feb 9-10:11 AM

Introduction to Algebra

To do now:

EXTRA HELP TODAY

- ⇒ Have your review packet (book?) on your desk.
- ⇒ Complete Warm Up

Agenda:

- ⇒ Review....Review
- ⇒ Test Thursday-Linear Equations

$$y = \frac{1}{2}x - 3$$

Warm Up:

⇒ Write the equation of a line parallel to $y = \frac{1}{2}x - 9$ in Standard Form.

Homework:

⇒ Study...Study...Study....and then...

$$\begin{cases} y = \frac{1}{2}x - 9 \\ \frac{1}{2}x - y = 9 \\ x - 2y = 18 \end{cases}$$

$$y = mx + b$$

$$Ax + By = C$$

Feb 3-7:52 PM

Write the equation of a line parallel to $y = \frac{1}{2}x - 9$ in Standard Form.

Feb 3-8:41 PM

Additional Concepts...

Parallel lines have what in common?

$\neq \frac{4}{1} \leftrightarrow -\frac{1}{4}$

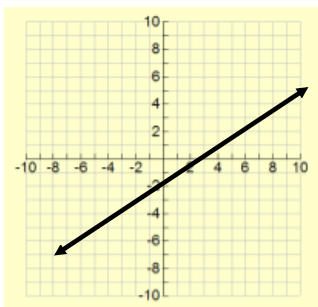
Perpendicular lines have slopes that are?

$-\frac{3}{4} \quad 6$

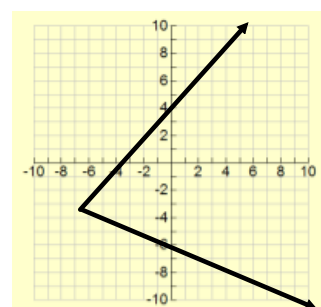
*OPPOSITE
RECIPROCAL*

Function: For every "y" value, there is only one unique "x" value...Think vertical line test!

x	y
2	3
-1	4
5	7
0	-1



x	y
-2	3
-1	4
-2	7
0	-1



Feb 9-6:52 AM

PERPENDICULAR BUT
HAS THE SAME
Y-INTERCEPT TO:
$$y = -\frac{7}{8}x - 3$$

Feb 9-8:48 AM

Advanced Algebra



To do now:

- ⇒ Complete Warm Up
- ⇒ Blank paper on your desk.

EXTRA HELP TODAY

Agenda:

- ⇒ Review for Factoring Test tomorrow

Warm Up:

- ⇒ Solve for x: $(x + 2)^2 = 16$

Homework:

- ⇒ Study...Study...Study



Feb 3-7:52 PM

Solving Equations with Factoring

$$(x+2)^2 - 16 = 0$$

$$x^2 + 4x + 4 - 16 = 0$$

$$x^2 + 4x - 12 = 0$$

$$(x+6)(x-2) = 0$$

$$x = -6, 2$$

$$(x+2+4)(x+2-4) = 0$$

$$(x+6)(x-2) = 0$$

$$3(x+4)^2 + 9(x+4) - 7 = 0$$

$$3y^2 + 9y - 7 = 0$$

Feb 6-1:32 PM

$$x^3 + y^3 = (x+y)(x^2 - xy + y^2)$$

$$x^3 - y^3 = (x-y)(x^2 + xy + y^2)$$

$$(y+2)(y^2 - 2y + 4)$$

$$(x+y)^3$$

$$(x+y)^4$$

$$(x+y)^5$$

$$y^3 + 8$$

$$x^3 + 27$$

Feb 9-12:31 PM