

NAME: _____ MOD: _____

Mid Term Study Guide

Math 2

7.EE.1.2/1.2/2.3/2.4

Simplifying Expressions using the Order of Operations

The Order of Operations is

Simplify: $(6 + 12 \div 3) - 2^3 \cdot 8$

$8 - 2 \cdot 2 + 6$

Solving Equations

Solve for x:

$x + 12 = 4$

$3x + 5 = -4$

$\frac{x}{12} = 25$

Inequalities

Write a phrase that represents the following inequality:

$3w - 2 \geq 10$ _____

Solve the above!

Working with Real Numbers

Express the following as decimals: 5%

$$3\frac{4}{11}$$

Joseph makes \$8.50 for each lawn that he mows. How much money will Joseph have earned after mowing 4 lawns?

James wants to rent a car. It costs an initial \$50 fee plus \$0.25 per mile. How many miles can James travel if he has \$75?

7.NS.1.1/1.2/1.3

Operations with Real Numbers

Find the sum or difference: $8 + (-4) + (6)$

$9 - 12 - (-12)$

$\frac{3}{16} + \frac{5}{16}$

Create a number line to show $3 - 5$.



Subtract to following: $-\frac{1}{4} - \frac{3}{4}$

$-4 - (-7)$

A diver began his journey at 3m above sea level. After one hour he traveled 15m further down. At what elevation is the diver after one hour?

Evaluate $a - b$ if $a = -12$ and $b = -5$

7RP.1.1/1.2/1.3**Unit rates and Proportions**

Michelle paid \$28.86 to fill up her gas tank. If her tank holds 14.5 gallons, what was the price per gallon to the nearest cent?

Melissa's airplane travels 685 miles in 3 hours. How far can the same plane travel in 5 hours?

Determine if $\frac{14}{21}$ and $\frac{10}{15}$ are proportional.

Vanessa sold \$92 in girl scout cookies. Her troop receives 45% of the sales. How much did the troop receive from Vanessa's sale?

A video game has a regular price of \$60. The game is on sale for 30% off. What is the sale price of the video game?

A local middle school has 750 students. In a random sample of 100 students, 15 of them play basketball. Predict the number of students at the school that play basketball.