

Integer Poster Project (Ms. Reeves-1st 9week)

Due Sept. 20, 2019

(Objective: You are to make and present a poster or electronic presentation showing what you have learned from your study of positive and negative rational numbers.)

Choose a theme for your poster. Be creative!

Choose five (5) rational numbers: Choose **one(1)** integer, **one(1)** negative fraction, **one(1)** positive fraction, **one(1)** negative decimal and **one(1)** positive decimal. **ALL of your numbers MUST be between -1 and 1.**

Make your poster using the information below:

- Comparing**
- Use the $>$, $<$, and $=$ to compare the two negative numbers.
 - Use the $>$, $<$, and $=$ to compare the two positive numbers.
 - Graph all five numbers on a number line.

Absolute value ● Write the absolute value of each number and explain your reasoning.

Number problems (You must choose from your five original numbers.)

- Create two addition problems; one using numbers with like signs and the other using numbers with different signs.
- Create two subtraction problems; one using numbers with like signs and the other using numbers with different signs.
- Create two multiplication problems; one using numbers with like signs and the other using numbers with different signs.
- Create two division problems; one using numbers with like signs and the other using numbers with different signs.
- Create two problems with at least two different operations, using both positive and negative numbers

Three real-life problems with solutions :

- Write three real-life problems involving rational numbers and solve to show their solutions. Use a different operation in each problem.

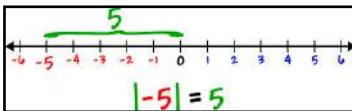
Rubic:

Comparing:	2 Positive Numbers	4
	2 Negative Numbers	4
Absolute Value:	All 5 show Absolute Value	5
Number Problems:	2 Addition Problems (1-different signs & 1-same signs)	4
	2 Subtraction Problems (1-different signs & 1-same signs)	4
	2 Multiplication Problems (1-different signs & 1-same signs)	4
	2 Division Problems (1-different signs & 1-same signs)	4
	2 Problems with 2 different Operations, using positive and negative numbers.	4
	3 Real Life Problems with Solutions	6
Turning it in on Time		1
Total:		40

EXAMPLES:

Using the numbers -0.5 , $-1/3$, $+0.25$ and $+2/9$.

Comparing Rational Numbers: $-1/3 = -.3333\dots$ $-0.5 < -1/3$



Absolute value Section: Students should demonstrate an understanding that absolute value is the distance on the number line between the selected number and zero.

Using the four basic operations:

(Addition) $-0.5 + -1/3 = -1/2 + -1/3 = -3/6 + -2/6 = -5/6$.

(Subtraction) $2/9 - (-0.5) = 4/18 + 9/18 = 13/18$

(Multiplication) $2/9 * (-1/3) = -2/27$

(Division) $2/9 (-1/3) = 2/9 * -3/1 = -6/9 = -2/3$

At least TWO different operations:
$$\frac{1}{3} - (0.25) + -0.5 = \frac{4}{12} - \frac{3}{12} + -\frac{6}{12} = -\frac{5}{12}$$

Students should state rules and properties in their own words.

STANDARDS COVERED FOR 7th GRADE MATH THROUGH THIS PROJECT:

CONTENT MGSE7.NS.1 Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram. MGSE7.NS.1a Show that a number and its opposite have a sum of 0 (are additive inverses). Describe situations in which opposite quantities combine to make 0. For example, your bank account balance is $-\$25.00$. You deposit $\$25.00$ into your account. The net balance is $\$0.00$. MGSE7.NS.1b Understand $p + q$ as the number located a distance from p , in the positive or negative direction depending on whether q is positive or negative. Interpret sums of rational numbers by describing real world contexts. MGSE7.NS.1c Understand subtraction of rational numbers as adding the additive inverse, $p - q = p + (-q)$. Show that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle in real-world contexts. MGSE7.NS.1d Apply properties of operations as strategies to add and subtract rational numbers. MGSE7.NS.2 Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers. MGSE7.NS.2a Understand that multiplication is extended from fractions to rational numbers by requiring that operations continue to satisfy the properties of operations, particularly the distributive property, leading to products such as $(-1)(-1) = 1$ and the rules for multiplying signed numbers. Interpret products of rational numbers by describing real-world contexts. MGSE7.NS.2b Understand that integers can be divided, provided that the divisor is not zero, and every quotient of integers (with non-zero divisor) is a rational number. If p and q are integers then $-(p/q) = (-p)/q = p/(-q)$. Interpret quotients of rational numbers by describing real-world contexts. MGSE7.NS.2c Apply properties of operations as strategies to multiply and divide rational numbers.

We understand that there is a Poster Project due in Ms. Reeves' Math Class, due on Sept. 20, 2019.

Student Signature: _____ **Period:** _____

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