Today's Plan:

Learning Target (standard): I will perform operations on rational numbers and simplify the results.

Students will: Complete practice problems over previous concepts at the boards, put up homework problems on the board and make necessary corrections to their own work, take notes over new material and complete practice problems over new concepts.

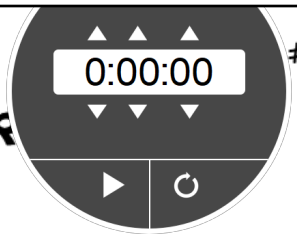
Teacher will: Provide practice problems over previous concepts, check homework problems for accuracy and provide students feedback, describe and provide examples of new concepts and assign students assessment problems over new concepts.

Assessment: Board work, homework check and homework assignment

Differentiation: Students will work at the board, go over and correct homework at their seats, actively engage in lecture over new concepts, practice new concepts with the aid of other students and the teacher and complete homework assignment.

NAME _____ #10

BELL RINGER



1.) Add $5 + (-9) + 2$.

$5-9+2 = -2$

2.) Evaluate the expression $\frac{75-5^2}{3+2}$.

$\frac{75-25}{3+2} = \frac{50}{5} = 10$

3.) Is the table a function? Why or why not?

Input	0	2	2	3
Output	-1	2	4	6

Not; same input with different outputs

Simplify.

12) $\frac{9}{8} - \left(-\frac{3}{2}\right) + \left(-1\frac{2}{3}\right) =$ $\frac{9\cdot3}{8\cdot3} + \frac{3\cdot12}{2\cdot12} - \frac{5\cdot8}{3\cdot8}$

$\frac{27}{24} + \frac{36}{24} - \frac{40}{24}$

$\frac{23}{24}$

Classify the given number.

$-\frac{4}{5}$ rational $\mathbb{Q}$
real $\mathbb{R}$

Classify the given number.

$\sqrt{144} = 12$

natural $\mathbb{N}$
whole
integer $\mathbb{Z}$
rational $\mathbb{Q}$
real $\mathbb{R}$

List all of the properties of real numbers.

Commutative of Addition

Commutative of Multiplication

Associative of Addition

Associative of Multiplication

Identity of Addition

Identity of Multiplication

Zero Property

Distributive Property

Evaluate each expression.

9) $\left(-\frac{1}{2}\right)+4\frac{3}{4}$

$-\frac{1\cdot2}{2}+\frac{19\cdot1}{4}$

$-\frac{2}{4}+\frac{19}{4}$

$\frac{17}{4}$

10) $\left(-1\frac{5}{6}\right)+\frac{7}{4}$

$-\frac{11\cdot2}{6}+\frac{7\cdot3}{4}$

$-\frac{22}{12}+\frac{21}{12}$

$\frac{-1}{12}$

11) $\frac{4}{5}-4\frac{5}{6}$

$\frac{4\cdot6}{5}-\frac{29\cdot5}{6}$

$\frac{24}{30}-\frac{145}{30}$

$\frac{-121}{30}$

12) $1\frac{3}{7}-\left(-\frac{3}{2}\right)$

$\frac{10\cdot2}{7}+\frac{3\cdot7}{2}$

$\frac{20}{14}+\frac{21}{14}$

$\frac{41}{14}$

13) $\left(-1\frac{5}{8}\right)-3\frac{1}{4}$

$-\frac{13\cdot1}{8}-\frac{13\cdot2}{4}$

$-\frac{13}{8}-\frac{26}{8}$

$-\frac{39}{8}$

14) $\left(-\frac{1}{5}\right)-\left(-2\frac{1}{3}\right)$

$-\frac{1}{5}+2\frac{1}{3}$

$-\frac{1\cdot3}{5}+\frac{7\cdot5}{3}$

$-\frac{3}{15}+\frac{35}{15}$

$\frac{32}{15}$

15) $1-\left(-\frac{1}{2}\right)$

$\frac{1\cdot2}{1}+\frac{1\cdot1}{2}$

$\frac{2}{2}+\frac{1}{2}$

$\frac{3}{2}$

16) $(-2)+\left(-3\frac{1}{3}\right)$

$-\frac{2\cdot3}{1}-\frac{10\cdot1}{3}$

$-\frac{6}{3}-\frac{10}{3}$

$\frac{-16}{3}$

Simplify.

$$\left(2\frac{2}{3}\right)\left(3\frac{3}{5}\right)$$

$\frac{8}{3} \cdot \frac{18}{5}^{6} = \frac{48}{5}$

Simplify.

$$2\frac{1}{3} \div (-2)$$

$\frac{7}{3} \div \frac{-2}{1}$

$\frac{7}{3} \cdot -\frac{1}{2}$

$-\frac{7}{6}$

Simplify.

$$\left(1\frac{1}{10}\right)\left(-\frac{3}{2}\right)$$

$\frac{11}{10} \cdot \frac{-3}{2}$

$-\frac{33}{20}$

Simplify.

$$\left(-1\frac{4}{9}\right)\left(\frac{7}{8}\right)$$

$-\frac{13}{9} \cdot \frac{7}{8}$

$-\frac{91}{72}$

Simplify.

$$-2\frac{1}{6}+3\frac{1}{4}$$

$$-\frac{13}{6}\cdot\frac{2}{2}+\frac{13}{4}\cdot\frac{3}{3}$$

$$-\frac{26}{12}+\frac{39}{12}$$

$$\frac{13}{12}$$

Assignment:

Operations on Rational Numbers
Practice 2 #1-12

* You will find this on Google Classroom *