Today I am going to participate in class!

For today I will need:

- Pencil
- Vocabulary Sheet
- Homework
- Text Book





7.NS.2b

I can use long division with positive and negative numbers.

Warm-Up

In your graph paper, answer the following questions:

Use what you know about division to find the answers to the following number sentences. Express your answers as BOTH a fraction and a decimal. Remember, a fraction line also represents division.

$$3 \div -6 = \frac{-4}{16} =$$

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

As a team, answer the questions on <u>page 63</u>. Record the answers in your graph paper.

- Recall that some fractions have decimals that terminate. For example, $\frac{3}{4} = 0.75$. Other fractions have decimals that repeat. For example, $\frac{1}{3} = 0.333... = 0.\overline{3}$. The 3 repeats.
 - **1.** State whether each fraction will *terminate* or *repeat*. Then write each fraction as a decimal.
 - **a.** $\frac{2}{5}$

b. $\frac{3}{8}$

c. $\frac{-5}{6}$

- Recall that some fractions have decimals that terminate. For example, $\frac{3}{4} = 0.75$. Other fractions have decimals that repeat. For example, $\frac{1}{3} = 0.333... = 0.\overline{3}$. The 3 repeats.
 - State whether each fraction will terminate or repeat. Then write each fraction as a decimal.
 - **d.** $\frac{35}{10}$

e. $\frac{8}{-9}$

f. $\frac{-3}{-11}$

terminating decimal

A decimal that ends and doesn't keep going.

ex:

some terminating decimals

$$\frac{3}{4} = 0.75$$

$$\frac{25}{16} = 1.5625$$

repeating decimal

A decimal that will eventually repeat.

ex:

some repeating decimals

$$\frac{1}{3} = 0.33333 \dots = 0.\overline{3}$$

$$\frac{1}{11} = 0.090909 \dots = 0.\overline{09}$$

Class Work Answers:

- **H. 1.** a. 0.4 (terminating)
 - b. 0.375 (terminating)
 - c. $-0.8\overline{3}$ (repeating)
 - d. 3.5 (terminating)
 - e. $-0.\overline{8}$ (repeating)
 - f. $0.\overline{27}$ (repeating)

Note on Notation You know that a rational number is any number that you can write in the form $\frac{p}{q}$, where p and q are integers and $q \neq 0$. When a rational number is negative, the negative sign can be associated with the numerator, the denominator, or the entire fraction. For positive integers a and b,

$$\frac{-a}{b} = \frac{a}{-b} = -\frac{a}{b}$$

For example, suppose a = 6 and b = 2.

$$\frac{-6}{2} = \frac{6}{-2} = -\frac{6}{2} = -3$$

Homework:

p.68-70 #14 and #32-35