

$$\frac{-49}{7}$$

$$\frac{-50}{-5}$$

$$\frac{144}{-12}$$

## **Fractions $\leftrightarrow$ Decimals**

Essential Question: Explain the steps for converting fractions to decimals and decimals to fractions. Compare the two processes.

## Vocabulary

**Rational Number:** is any number that can be written as a fraction.

**Terminating Decimal:** The decimal has an end, because there is a point where the remainder is 0.

**Repeating Decimal:** the division leads to a repeating block of 1 or more digits.

## Writing Fractions & Decimals

1) Divide

*\*hint: the top # goes  
inside the house*

$$\frac{5}{4}$$

$$4 \overline{)5}$$

ex 1

$$\frac{11}{9}$$

ex 2

$$\frac{-1}{6}$$

Turn  $\frac{2}{5}$  into a decimal

Turn  $\frac{3}{10}$  into a decimal



Turn  $\frac{2}{3}$  into a decimal

Think, pair, share

$$\frac{7}{20}$$

$$\frac{-1}{6}$$

$$\frac{5}{3}$$

$$\frac{8}{5}$$

## Writing Terminating Decimals as Fractions

### Steps

1) Find the place value of the digit furthest right.

2) Make the place value the denominator.

3) Write all of the digits after the decimal point as the numerator.

### Example

-5.39

100

-5  $\frac{39}{100}$

ex 3     .622

ex 4      -2.855

Turn .2 into a fraction

Turn  $.35$  into a fraction

Turn  $.605$  into a fraction



Think, pair, share

.75

.4

-2.2

.35

1.125

3.21

Write:

Explain how you know that a fraction is completely simplified.

Summary:

To turn a fraction into a decimal, \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_.

To turn a decimal into a fraction \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_.