

6th Grade
Jan. 4, 2021

Welcome back! :)

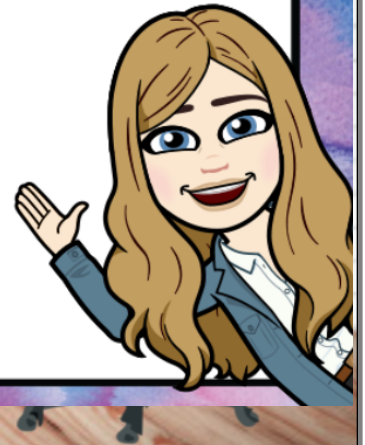
- Today we will:
- set up table of contents for Unit 2 on Fractions, Decimals, and Percents
 - complete notes (on Edpuzzle if you are remote and not in class)
 - work on WS



HOMEWORK:

Complete pg 93 WS

New ALEKS assignment starts tomorrow (60 min and 5 topics) and will be due Jan 12



2-1 Decimals and Fractions

Rational Number: Any number that can be written as a fraction

Frayer Model: Rational Numbers

Glue into INB:

Definition		Facts/Characteristics	
Any number that can be written as a fraction		$\frac{A}{B}$, where $B \neq 0$	
Examples		Non-examples	
$-\frac{1}{2}$	$-3.\overline{1}$	$-\sqrt{2}$	$\sqrt{30}$
0.3333...	0.625	0.73205...	

Decimals and Fractions Foldable

Decimal Place Value Chart

Thousands	Hundreds	Tens	Ones	Decimal point	Tenths	Hundredths	Thousandths
3	6	8	4	.	2	6	

Decimals to Fractions:

write the decimal as a fraction using place value

Step 1: (tenths hundredths, thousandths)

Step 2: simplify to lowest terms

$$0.8 = \frac{8}{10} \div \frac{2}{2} = \frac{4}{5}$$

$$0.28 = \frac{28}{100} \div \frac{2}{2} = \frac{14}{50} \div \frac{2}{2} = \frac{7}{25}$$

$$9.\underline{\underline{25}} = 9 \frac{25}{100} \div \frac{5}{5} = \frac{5}{20} \div \frac{5}{5} = \frac{1}{4} \rightarrow 9 \frac{1}{4}$$

Fractions to Decimals:

Use equivalent fractions to make

Step 1: denominator of 10, 100, or 1000

OR divide numerator by denominator

Step 2: Use place value to write the fraction as a decimal

$$\frac{3}{5} \times \frac{2}{2} = \frac{6}{10} = 0.6$$

$$\begin{array}{r} 5 \overline{) 3.0} \\ \underline{-30} \\ 0 \end{array}$$

$$\frac{14}{25} \times \frac{4}{4} = \frac{56}{100} = 0.56$$

$$25 \overline{) 14.00}$$

$$\frac{102}{250} \times \frac{4}{4} = \frac{408}{1000} = 0.408$$

Write each decimal as a fraction or mixed number in simplest form. (Examples 1-4)

1. $0.4 =$

Show your work.

$$\frac{4}{10} \div \frac{2}{2} = \frac{2}{5}$$

2. $0.64 = \frac{16}{25}$

$$\frac{64}{100} \div \frac{2}{2} = \frac{32}{50} \div \frac{2}{2} = \frac{16}{25}$$

3. $2.75 =$

$$2\frac{75}{100} \div \frac{25}{25} = 2\frac{3}{4}$$

Write each fraction or mixed number as a decimal. (Examples 5 and 6)

4. $\frac{27}{75} = 0.36$

$$75 \overline{) 27.00}$$

5. $\frac{7}{2} = 3.5$

$$\frac{7}{2} \times \frac{5}{5} = \frac{35}{10} = 3.5$$

6. $3\frac{1}{5} = 3.2$

$$3\frac{1}{5} \times \frac{2}{2} = 3\frac{2}{10} = 3.2$$

$$\frac{27}{75} \div \frac{3}{3} = \frac{9}{25}$$

$$\frac{9}{25} \times \frac{4}{4} = \frac{36}{100}$$

Hint for #4: simplify first



Homework:

Independent Practice

Go online for Step-by-Step Solutions



Write each decimal as a fraction in simplest form. (Examples 1–3)

1. $0.5 =$ _____

2. $0.7 =$ _____

3. $0.33 =$ _____

4. $0.875 =$ _____



Write each fraction or mixed number as a decimal. (Examples 5 and 6)

5. $\frac{77}{200} =$ _____

6. $\frac{1}{20} =$ _____

7. $\frac{12}{75} =$ _____

8. $8\frac{21}{40} =$ _____

9. **STEM** Mercury orbits the Sun in $87\frac{24}{25}$ Earth days. Venus orbits the Sun in $224\frac{7}{10}$ Earth days, and Mars orbits the Sun in $686\frac{49}{50}$ days. Write each mixed number as a decimal. (Example 6)

10. **STEM** Last week, a share of stock gained a total of 1.64 points. Express this gain as a mixed number in simplest form. (Example 4)

11. **MP Use Math Tools** The table shows the ingredients in an Italian sandwich.

a. What fraction of a pound is each ingredient?

b. How much more meat is in the sandwich than vegetables? Write the amount as a fraction in simplest form.

c. What is the total weight of the Italian sandwich? Write the amount as a fraction in simplest form.

Ingredient	Amount (lb)
meat	0.35
vegetables	0.15
secret sauce	0.05
bread	0.05