Fractions, Decimals, Percent Mini-Unit

Name: _____

Period: _____

Calendar:

Wednesday, October 3rd	Thursday, October 4th	Tuesday, October 9th
• Focus: Fraction/ Decimal/ Percent Triangle • IXL Topic: S.1, S.2, S.3	• Focus: Fraction/ Decimal/ Percent Triangle • IXL Topic: S.1, S.2, S.3	• Focus: Percent of a number • IXL Topic: S.4, S.5
Wednesday, October 10th	**Thursday, October 11th**	**Friday, October 12th**
• Focus: Percent of a number • IXL Topic: S.4, S.5	• Focus: Real World Application • IXL Topic: V.5, V.6, V.7	• Focus: Quiz • IXL Topics: S.1, S.2, S.3, S.4, S.5, V.5, V.6, V.7

There is no school on Friday, October 5th or Monday, October 8th due to Columbus Day Weekend!

***If Lost, Please Return to: Ms. Rankin (Room-F106)**

Standards:

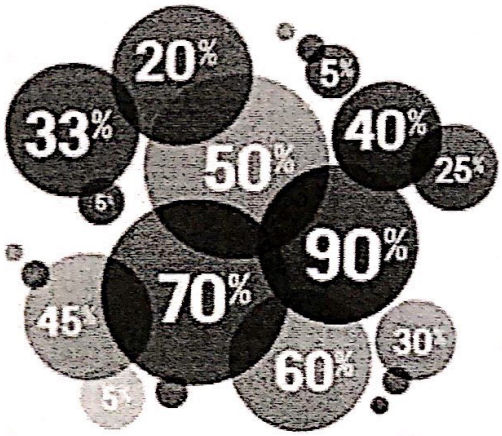
MGSE6.RP.3c Find a percent of a quantity as a rate per 100 (e.g. 30% of a quantity means 30/100 times the quantity); given a percent, solve problems involving finding the whole given a part and the part given the whole.

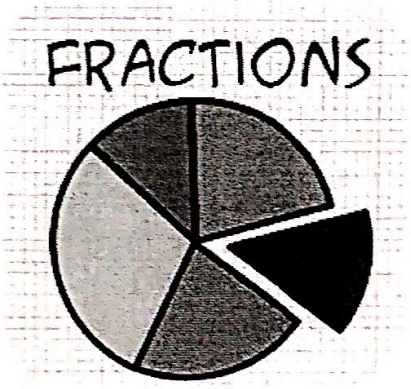
Essential Questions:

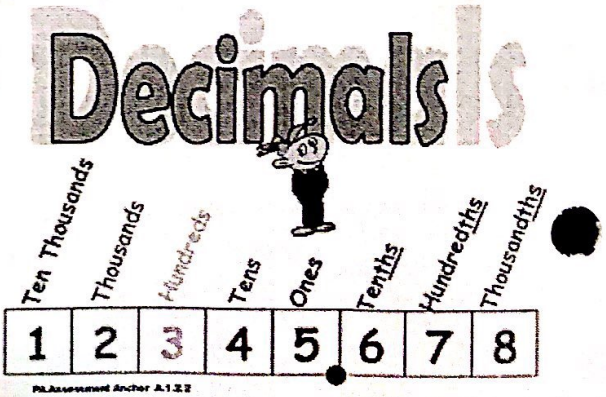
- What are percentages?
- How do I convert from a faction/ decimal/ percent?
- How do I find the percent of a quantity?

Vocabulary Words:

- Percent: A fraction or ratio in which the denominator is 100. A number compared to 100.
- Quantity: is an amount that can be counted or measured.







Fractions, Percents, and Decimals

Fraction	Percent	Decimal
1	100%	1.0
1/2	50%	0.5
1/3	33.3%	0.33
1/4	25%	0.25
1/5	20%	0.2
1/6	16.6%	0.166
1/8	12.5%	0.125
1/10	10%	0.1
1/12	8.3%	0.083

Converting
Fractions, Decimals, and Percentages

Fraction convert to Decimal

1. Divide the numerator by the denominator.

$$4\overline{)1.00} = .25$$

$$\begin{array}{r} .25 \\ 4\overline{)1.00} \\ -8 \\ \hline 20 \\ -20 \\ \hline 0 \end{array}$$

Fraction convert to Percentage

$\frac{1}{4}$

1. Divide the numerator by the denominator.

$$4\overline{)1.00} = .25$$

2. Multiply by 100 or move the decimal point two places to the right.

$0.25 \times 100 = 25.00$

or

$.25 = 25$

3. Add the percent symbol. 25%

Percentage convert to Decimal

1. Multiply by 100 or move the decimal point two places to the right.

$0.75 \times 100 = 75.00$

or

$.75 = 75$

2. Add the percent symbol.

$0.75 = 75\%$

Decimal convert to Fraction

0.75

1. Use the place value of the last digit to the right of the decimal point as the denominator.

$$\text{hundredths} = \frac{x}{100}$$

2. Remove the decimal point and make that number the numerator.

$$0.75 = \frac{75}{100}$$

3. Reduce the fraction to lowest terms.

$$\frac{75}{100} = \frac{3}{4}$$

Fraction convert to Percentage

1. Remove the percent symbol and make that number the numerator.
2. Use 100 as the denominator.

$$\frac{40}{100}$$

3. Reduce the fraction to lowest terms.

$$\frac{40}{100} = \frac{2}{5}$$

Percentage convert to Decimal

40%

1. Remove the percent symbol.

40

2. Divide by 100 or move the decimal point two places to the left.

$$\frac{40}{100} = 0.40$$

$40.0\% = 0.40$

Fraction/Decimal/Percent Mini Unit	Topic: Fractions and Decimals	Date:

Essential Question:

Questions:

Notes:

Decimals like 0.58, 0.12, and 0.08 can be written as fractions.

To write a decimal as a fraction, you can follow these steps.

1. Identify the place value of the last decimal place.
2. Write the decimal as a fraction using the place value as the denominator, and simplify.

Example 1

Write 0.5 as a fraction in simplest form.

$0.5 = \frac{5}{10}$ — 0.5 means five tenths.

$= \frac{\overset{1}{\cancel{5}}}{\underset{2}{\cancel{10}}}$ — Simplify. Divide the numerator and denominator by the GCF, 5.

$= \frac{1}{2}$ — So, in simplest form, 0.5 is $\frac{1}{2}$.

Example 2

Write 0.35 as a fraction in simplest form.

$0.35 = \frac{35}{100}$ — 0.35 means 35 hundredths.

$= \frac{\overset{7}{\cancel{35}}}{\underset{20}{\cancel{100}}}$ — Simplify. Divide the numerator and denominator by the GCF, 5.

$= \frac{7}{20}$ — So, in simplest form, 0.35 is $\frac{7}{20}$.

Example 3

Write $\frac{3}{5}$ as a decimal.

Since 5 is a factor of 10, write an equivalent fraction with a denominator of 10.

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

So, $\frac{3}{5} = \frac{6}{10}$.

Your Turn: Practice

Write each decimal as a fraction or mixed number in simplest form.

1) 0.9 2) 0.8 3) 0.27 4) 0.75

5) 0.34 6) 0.125 7) 0.035 8) 0.008

Write each fraction or mixed number as a decimal.

9. $1\frac{3}{8}$ **10.** $1\frac{5}{8}$ **11.** $3\frac{5}{16}$ **12.** $4\frac{9}{20}$

Summary:

NAME _____ DATE _____ PERIOD _____

Homework Practice- *Decimals and Fractions*

Write each decimal as a fraction in simplest form.

1. 0.5

2. 0.8

3. 0.9

Write each decimal as a mixed number in simplest form.

4. 3.6

5. 10.4

6. 2.11

Write each fraction or mixed number as a decimal.

7. $\frac{7}{8}$

8. $\frac{7}{20}$

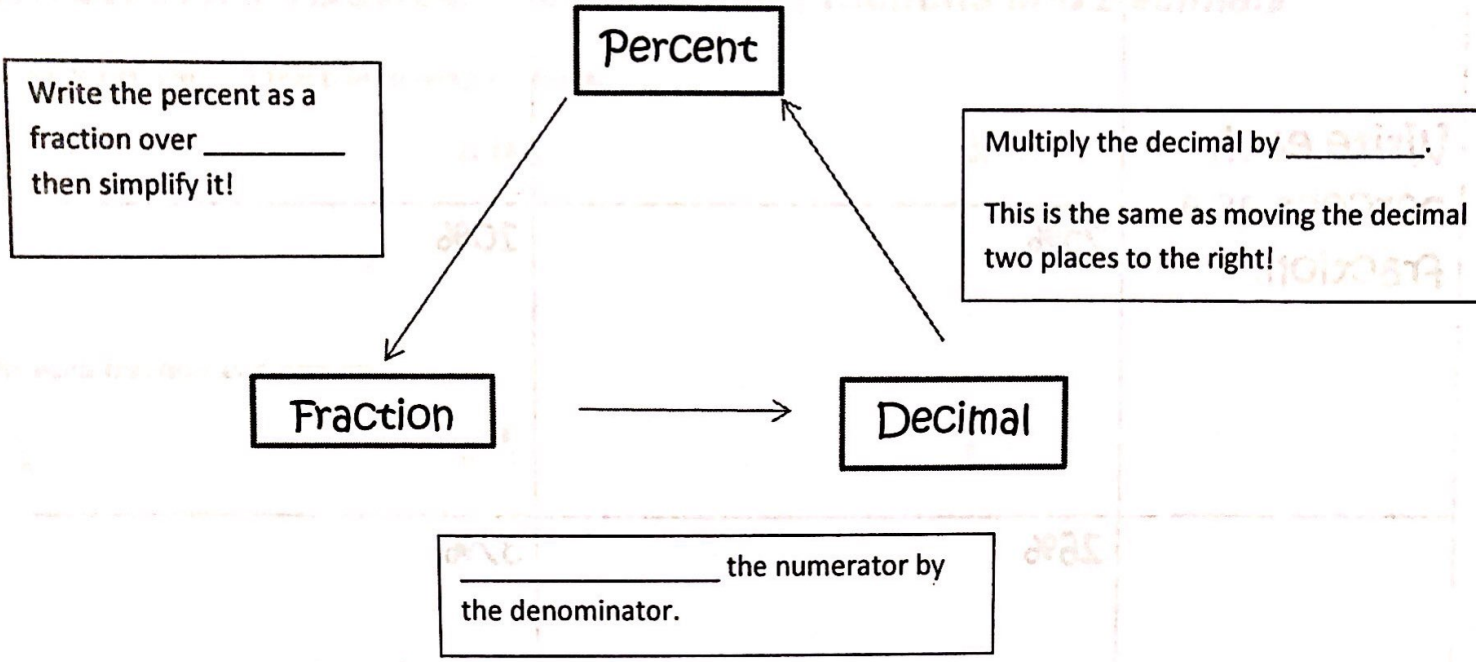
9. $\frac{13}{250}$

10. $\frac{7}{5}$

11. $9\frac{29}{40}$

12. $7\frac{29}{80}$

A _____ is an amount per every one hundred.



Write each decimal as a percent.	0.72	0.175
	0.91	1.0

Write each percent as a fraction.	5%	20%
	75%	10%
Write each percent as a decimal.	26%	37%
	80%	99%
Write each fraction as a percent.	5/20	3/10
	6/25	1/2

NAME _____ DATE _____ PERIOD _____

Homework Practice- *Percents and Fractions and Decimals*

Write each percent as a fraction in simplest form.

1. 60%

2. 16%

3. 4%

Write each fraction as a percent.

4. $\frac{6}{10}$

5. $\frac{8}{20}$

6. $\frac{8}{10}$

Express each percent as a decimal.

7. 29%

8. 63%

9. 4%

10. 9%

Express each decimal as a percent.

11. 0.45

12. 0.12

13. 0.68

14. 0.73

Replace each ● with <, >, or = to make a true sentence.

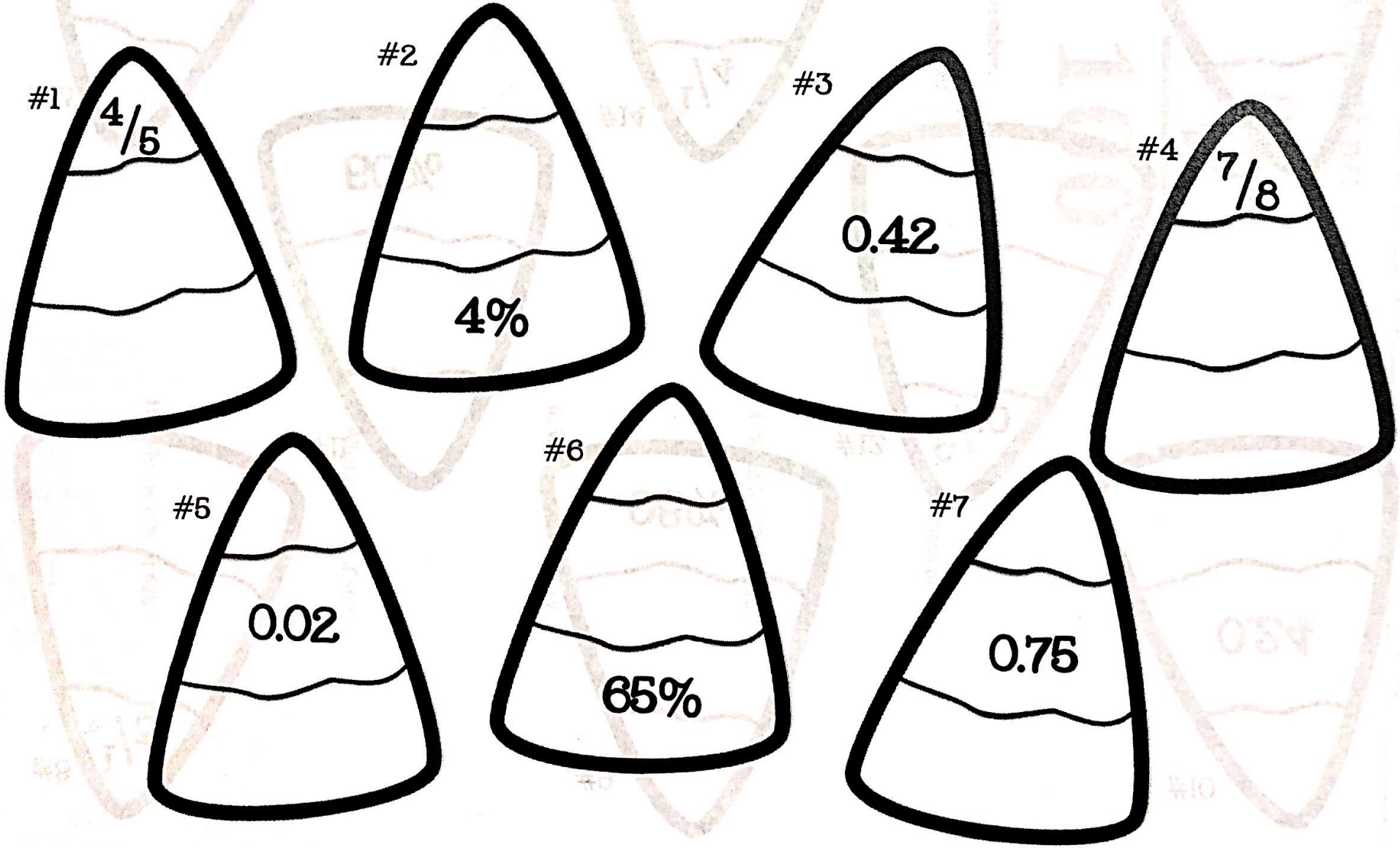
15. 26% ● 0.3

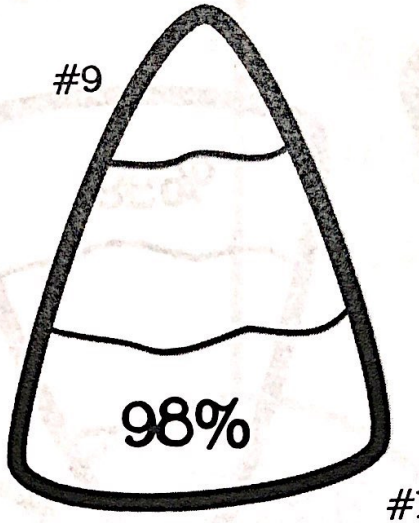
16. 0.9 ● 9%

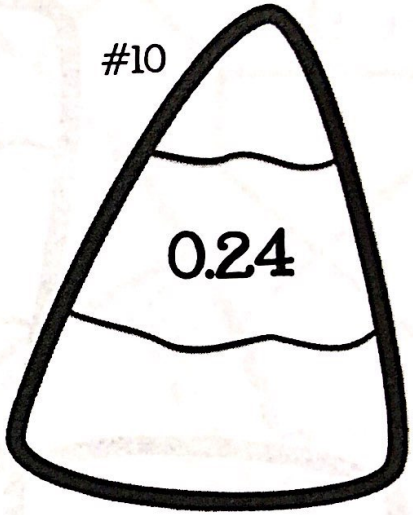
17. 4.7 ● 47%

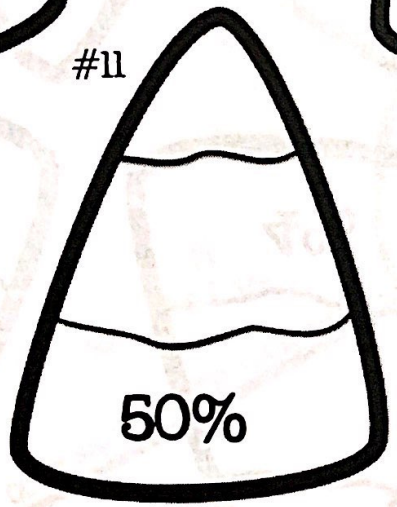
sweet conversions

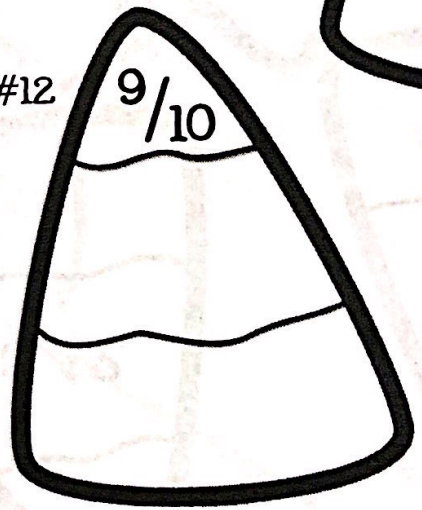
Write each number as a fraction in simplest form in the top, a decimal in the middle, and a percent in the bottom of each candy corn.

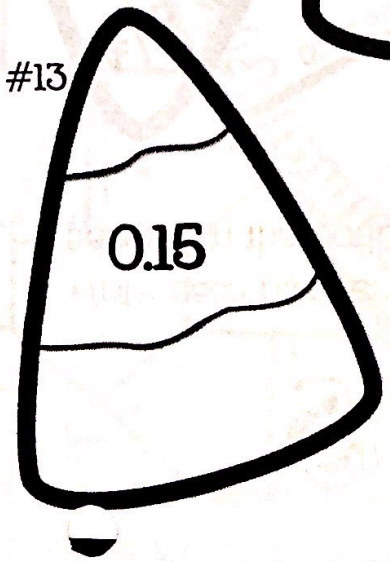


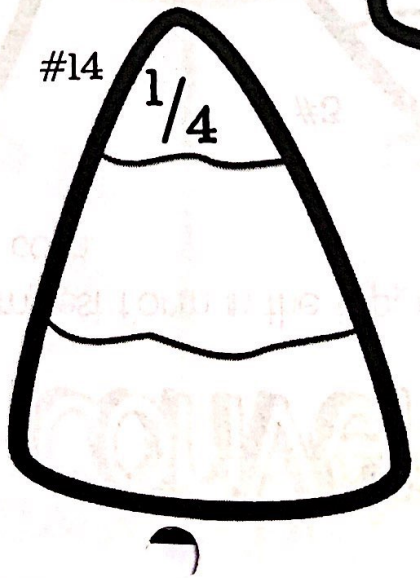


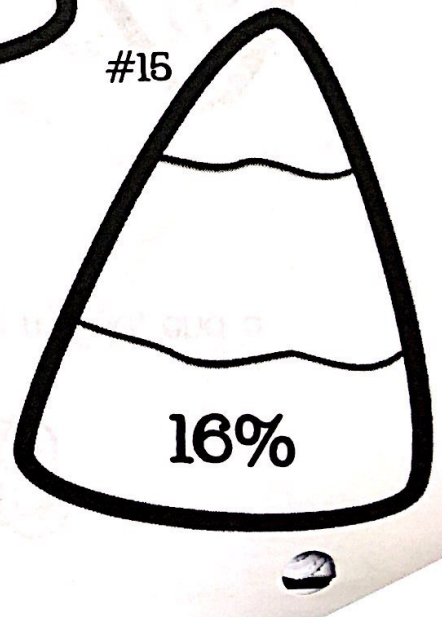












NAME _____ DATE _____ PERIOD _____

Percent Of A Number:

$$\frac{is}{of} = \frac{\%}{100}$$

Find the percent of each number.

1. What is 15% of 82?

2. What is 256% of 75?

3. What is 0.5% of 50 ?

4. What is 76% of 450?

5. What is 85% of 30?

6. What is 0.8% of 56?

7. What is 16% of 75?

8. What is 430% of 50?

9. What is 0.44% of 375?

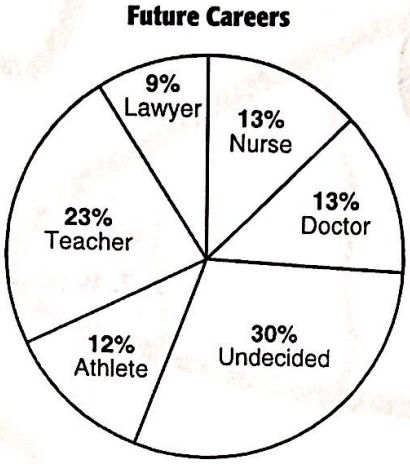
10. What is 15% of 620?

NAME _____ DATE _____ PERIOD _____

Problem-Solving Practice

Percent of a Number

CAREERS The results of a survey about what 432 students would like as a career are shown below. Use the graph to answer Exercises 1–3. Round to the nearest whole number if necessary.



1. How many of the students want to be teachers?	2. How many students want to work as doctors or nurses?
3. How many students did *not* want to be lawyers?	4. **SCHOOL** The school took in $875 at the bake-sale fundraiser. Sixty-eight percent of the money came from cupcake sales. How much money did the school make selling cupcakes?
5. **THEME PARK** Eduardo spent 35% of his time at the theme park on roller coasters. If he was there for 8 hours, how much time did he spend on roller coasters?	6. **TRACK** Jesse was in the lead for 75% of the laps during the track race. If the race lasted 12 laps, how many laps did Jesse lead?

Pre-Algebra Name_____ ID: 1

Tax and Discount

Date_____ Period____

Find the selling price of each item.

1) Original price of a sled: $64.99
Discount: 30%

2) Original price of a wagon: $149.95
Discount: 30%

3) Original price of shoes: $49.50
Discount: 45%

4) Original price of a comic book: $1.95
Tax: 4%

5) Original price of a sweater: $26.99
Tax: 5%

6) Original price of a goldfish: $3.15
Tax: 2%