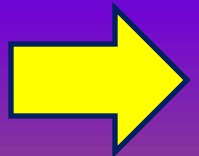# As you scroll through the slides

- Have the Unit 8 Study Guide in front of you – printed or opened on your computer.

- Use the examples to help you on your test.

- Work out the problems on paper then put in your answer

- Use a calculator

- Mrs. Baker cannot help you answer the questions

1. Which ratio is equivalent to $\frac{15}{25}$?

A. $\frac{3}{5}$

B. $\frac{1}{5}$

C. $\frac{3}{25}$

Cross multiply to see which one gives you the same answer.

$$\frac{3}{5} = \frac{15}{25}$$

5*15 = 75   3*25 = 75

2. Which is a unit rate?

- Unit rates have a <u>denominator of 1</u>

a. $\dfrac{\$15}{2\ Hours}$

b. $\dfrac{\$7.50}{1\ Hour}$

c. $\dfrac{100\ miles}{5\ gallons}$

d. $\dfrac{1\ year}{365\frac{1}{4}\ days}$

3. A bag contains 8 blue marbles and 20 red marbles. What is the ratio, *written in lowest terms*, of blue marbles to the total number of marbles in the bag? (Use the slash mark to write your ratio.)

Ratio in words: blue : total marbles

Ratio in numbers: 8 : 28

Ratio as fraction: 8/28

Reduce (divide out a 4): **2/7**

4. What is 93.2% written as a decimal?

- Move decimal point <u>two places to the left</u> and remove the % sign. D ← P

93.2% = 0.932

5. Convert $\frac{12}{25}$ to a decimal

- Divide the numerator by the denominator.

A. 12.25

B. 0.48

C. 2.08

$25\sqrt{12.00}$

6. What is 20% written as a fraction in *lowest terms*?

- Write the % as a fraction over 100

- Reduce

$$20\% = \frac{20}{100}$$

$$\frac{20 \div 20}{100 \div 20} = \frac{1}{5}$$

7. Tonya collected 150 different types of coins from different countries. Twenty-five of those coins were from Asia. What percent of the coins were from Asia? Round to the nearest percent, if necessary.

1. Write the ratio as a fraction
2. Turn the fraction into a decimal
3. Turn the decimal into a percent and round to the nearest whole number

25/150 = 0.1666 = 16.66 = 17%

8. Solve the proportion.

$$\frac{5}{x} = \frac{6}{15}$$

A. 5

B. 12

C. 12.5

D. 60

6x = 5*15

6x = 75

x = 75/6

x = 12.5

1. Cross multiply
2. Divide

9. Six tickets to the game cost $72 How much do 2 tickets cost?

- Set up a proportion comparing tickets to cost:

$$\frac{tickets}{cost} = \frac{tickets}{cost}$$

- Cross multiply and divide to solve

A. $12

B. $36

C. $24

D. $216

$$\frac{6}{72} = \frac{2}{c}$$

6c = 2*72

6c = 144

c = 144÷6

c = 24

Or: Find the cost for one ticket and then multiply by 2!

10. What is 2.30 written as a fraction or mixed number?

a. $2\frac{3}{10}$

b. $\frac{2}{30}$

c. $2\frac{1}{30}$

d. $\frac{3}{10}$

Convert the decimal into a fraction in simplest form.

2.30 = "two and thirty hundredths"

$2\frac{30}{100} = 2\frac{3}{10}$

11. What is 0.084 written as a percent?

- Move the decimal two places to the right

    D →P

- Add the % sign

0.084 = 8.4%

12. What is $\frac{13}{50}$ written as a percent?

- Change the fraction to a decimal (top dog in the house).
- Change the decimal to a percent (move decimal right 2 places).

$$\frac{13}{50} = 0.26 = 26\%$$

Now what?

- Check your answers

- Submit your test

- K-mail Mrs. Baker know you are finished!