

Name _____ Date _____ Pd _____

Quiz Review Fractions, Ratios, and Decimals

I. Draw a line to match each improper fraction with its equivalent mixed number.

$$\frac{9}{5}$$

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

$$\frac{7}{3}$$

$$1\frac{1}{5}$$

$$\frac{12}{10}$$

$$1\frac{4}{5}$$

$$\frac{15}{9}$$

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

II. Compare the fractions using the greater than (>), less than (<), or equal symbols (=).

1) $\frac{2}{3}$ _____ $\frac{5}{9}$

2) $\frac{3}{8}$ _____ $\frac{8}{3}$

3) $2\frac{1}{6}$ _____ $\frac{14}{6}$

III. Perform the indicated operation: add, subtract, multiply, or divide. Then write your answers in simplest fraction form while showing all work to earn full credit.

1) $\frac{7}{8} + \frac{5}{8} =$ _____

2) $\frac{6}{7} - \frac{4}{7} =$ _____

3) $\frac{1}{5} \times \frac{1}{2} =$ _____

4) $\frac{3}{4} \div \frac{2}{5} =$ _____

5) $\frac{1}{9} + \frac{2}{3} =$ _____

6) $\frac{2}{3} \cdot \frac{3}{8} =$ _____

7) $\frac{8}{9} \div \frac{1}{3} =$ _____

8) $2\frac{3}{4} - \frac{5}{8} =$ _____

9) $\frac{2}{7} \times 2\frac{1}{4} =$ _____

10) $1\frac{1}{4} + \frac{5}{12} =$ _____

11) $\frac{7}{3} - \frac{2}{9} = \underline{\hspace{2cm}}$

12) $8 \div \frac{5}{6} = \underline{\hspace{2cm}}$

12) Nikki's cousin lives 60 miles away, so Nikki decided to take the train to visit him. If the trip took $2\frac{1}{2}$ hours, how many miles per hour did the train travel?

IV. *Express each ratio as a fraction in simplest form.*

1) 24 footballs to 66 footballs

5) 15 quarts to 45 quarts

2) 12 pounds to 28 points

6) 14 pennies to 22 pennies

3) 4 dimes to 44 dimes

7) 35 rainy days out of 63 days

4) 8 inches to 16 inches

8) 42 gallons to 54 gallons

V. *Express each phrase as a rate and a unit rate. (Round your answer to the nearest hundredth.)*

	Rate	Unit Rate
1) 6 inches of snow in 5 hours	<u> </u>	<u> </u>
2) 6 movie tickets cost \$20.00	<u> </u>	<u> </u>
3) 9 pencils for 10 dollars	<u> </u>	<u> </u>
4) 9 batteries cost 22 dollars	<u> </u>	<u> </u>
5) Mowed 3 yards for \$35.00	<u> </u>	<u> </u>

Solve the ratio and rate word problems. Be sure to show work and include proper units.

- 1) For every 8 hotdogs sold at the malt shop there are 3 hamburgers sold. What is the ratio of hotdogs sold to hamburgers sold?
- 2) For every 5 PS3 games Carol owned she had 8 Wii games. What is her ratio of Wii games to PS 3 games?
- 3) At the store for every 6 movies sold there were 8 books sold. What is the ratio of books sold to movies sold?
- 4) At the movie theater the ratio of small popcorns sold to large popcorns sold was 5:8. For every _____ small popcorns sold there are _____ large popcorns sold.
- 5) For every 6 onions on a burger there are 8 pickles. What is the ratio of [pickles to onions?
- 6) In a bag of candy the ratio of chocolate pieces to sugar pieces was 8:2. For every _____ sugar pieces there are _____ chocolate pieces.
- 7) The ratio of cars to the trucks in a parking lot was 3:2. For every _____ trucks there were _____ cars.
- 8) At the burger shop the ratio of regular sodas sold to diet sodas sold was 5:3. For every _____ regular sodas sold there are _____ diet sodas sold.
- 9) At the thrift store for every 3 long sleeve shirts there were 2 short sleeve shirts. What is the ratio of long sleeve shirts to short sleeve shirts?
- 10) In a neighborhood for every 2 old homes there were 8 new homes. What is the ratio of old homes to new homes?
- 11) The ratio of boys to girls on a softball team was 2:6. For every ____ girls there are _____ boys.
- 12) At an orchard the ratio of green apples to red apples was 7:8. For every _____ red apples there were _____ green apples.

Find each percent change in decimal form (round to the thousandth when necessary) and then to the nearest percent. State if it is an increase or decrease. Show all work for full credit.

1) From 362 m to 156 m

7) From 309 grams to 299 grams

2) From 139 minutes to 385 minutes

8) From 326 ft to 241 ft

3) From \$328 to \$333

9) From 4048 minutes to 7548 minutes

4) From 259 hours to 274 hours

10) From 2150 miles to 7895 miles

5) From 284 grams to 206 grams

11) From 4359 ft to 5377 ft

6) From \$246 to \$221

12) From 5876 m to 6820 m

Fill in the missing parts of the table below. Write your answers in the boxes while converting fractions, decimals and percent.

	FRACTIONS	DECIMALS	PERCENT
1.		0.5	
2.			6%
3.	$\frac{8}{100}$		
4.			16%
5.		0.61	

Similar to calculating tips for meals, determining what your final cost of buying a shirt, pants, etc is adding sales tax depending on where you are when you buy the item. Use sales tax rate and the original price to determine your sales tax and final bill.

- 1) Original price = \$1,250 & sales tax rate = 6%
- 2) Original price = \$500 & sales tax rate = 2.5%
- 3) Original price = \$469 & sales tax rate = 5%
- 4) Original price = \$41,000 & sales tax rate = 9%
- 5) A stapler cost \$12 with a 1% sales tax rate.
- 6) A new television costs \$105 with a sales tax rate of 7%.
- 7) What is the sales tax if the original price is \$2,400 and the sales tax rate is 3.5%?
 - a. \$84
 - b. \$68
 - c. \$63
 - d. \$67