

Name: \_\_\_\_\_

Entering 7th Grade Summer Work Packet

**Part 1: Operations with Fractions**

1.  $1\frac{2}{3} + 5\frac{1}{5}$

2.  $7\frac{3}{4} + 2\frac{1}{3}$

3.  $9\frac{1}{4} - 3\frac{1}{3}$

4.  $8\frac{1}{3} - 5\frac{1}{7}$

5.  $\frac{3}{4} \times \frac{4}{6}$

6.  $\frac{9}{5} \div \frac{1}{10}$

7. Nicole's friend runs  $\frac{4}{5}$  of a mile, but her distance is only  $\frac{4}{9}$  of Nicole's distance. How far does Nicole run?

a.  $\frac{45}{16}$  mile

b.  $\frac{5}{9}$  mile

c.  $\frac{16}{45}$  mile

d.  $\frac{9}{5}$  mile

8. Jack and Helen are making cookies. The recipe says to combine  $\frac{1}{2}$  cup of butter with  $\frac{3}{4}$  cup chocolate chips and  $\frac{3}{8}$  cup chopped nuts. When these three ingredients are mixed together, how many cups of the mixture will Jake and Helen have? Show your work.

## **Part 2: Operations with Decimals**

1.  $28 - 6.3 =$

\*\*Remember when adding and subtracting decimals that you need to line up the decimal points.

2.  $7.042 - 6.1 =$

3.  $0.758 + 62.9 =$

4.  $0.32 \times 0.49 =$

**\*\*Remember when multiplying decimals, you do NOT need to line up the decimals. However, remember to count the decimal places within the problem to determine where the decimal goes in your answer.**

5.  $2.67 \times 5.4 =$

6.  $4.212 \div 0.13 =$

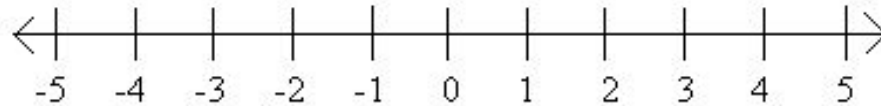
**\*\*Remember that when you set up a division problem, the first number goes inside the box.**

7.  $48.75 \div 0.5 =$

### Part 3: Ordering Integers

**Integers:** A positive or negative whole number, including zero.

1. Place the integers on the number line. -3, 0, -4, 2, 4



2. Place the integers on the number line. 8, -5, -7, 1, 4



3. Order the integers from least to greatest. 10, -4, -20, 38, -78, 12

\_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

4. Order the integers from greatest to smallest. 7, -5, 0, -19, -20, 23

\_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

5. Create a number line and place the integers on the number line.

17, 11, -6, 1, -3, -1, 8

6. Order the integers from smallest to largest. 128, -18, 60, -4, -495, 6

\_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

7. Order the integers from largest to smallest. -567, 63, -16, 0, -9, -345

\_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

## **Part 4: Ratios and Unit Rate**

**Ratio**: A comparison between two quantities.

Examples: 2 boys to 4 girls,  $\frac{2}{4}$  or 2:4

**Rate**: A **rate** is a special **ratio** in which the two terms are in different units.

Examples: 20 inches of snow in 7 hours,  $\frac{20}{7}$

**Unit Rate**: A ratio that is a part compared to one unit.

Example: I paid \$3.00 for 2 oranges or \$1.50 for 1

1. If there are 7 girls and 8 boys on the school's track team, what is the ratio of girls to boys?
  
  
  
  
  
  
  
  
  
  
2. If a sports field is 100 meters long and 40 meters wide, what is the ratio of its width to its length? Write your answer in 3 different ways.

3. If a car travels 120 miles in 2 hours, what is its rate of speed expressed as a unit rate?
4. If a plane travels at 900 km in 3 hours what is its rate of speed expressed as a unit rate?
5. Patty ran 10 miles in 65 minutes. Miguel ran 4 miles in 28 minutes. Use unit rate to determine who ran faster.
6. Hannah completed 40 problems in 32 minutes. Find the unit rate and explain what it means.



For each of the following questions, 7-10, write each phrase as a rate, and then calculate the unit rate. Round your answers to the nearest hundredth.)

7. 12 chocolate bars cost \$10.00:

a. RATE:

b. UNIT RATE:

8. 7 movie tickets cost \$40.00:

a. RATE:

b. UNIT RATE:

9. Lauren mowed 3 yards for \$35.00:

a. RATE:

b. UNIT RATE:

10. It snowed 14 inches in 6 hours:

a. RATE:

b. UNIT RATE: