Name _____ Period _____ Date_____

# RATIO REPRESENTATIONS (PR1)
# Essentials Pre-Assessment

1. Tiana wants to paint her room orange. In order to make the right color orange, she mixes two parts red with six parts yellow.
   a. Create a tape diagram to represent Tiana's orange paint mixture.

   b. How many parts of red paint does she need if she wants to make 64 total parts?

2. Using the table to the right, do the numbers in the rows represent equivalent ratios? ____ Explain.

| | Number of pencils | Number of rulers |
|---|---|---|
| Period 1 | 58 | 29 |
| Period 2 | 27 | 27 |
| Period 3 | 74 | 37 |

3. Murphy walks 8 miles every 2 hours.
   a. Create a double number line to represent this situation.

   b. How many miles does he walk per hour?

   c. At that rate, how many hours will it take Murphy to walk 21 miles?

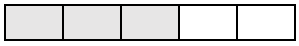
4. Buster gets $60 in allowance every four weeks. He is saving all of his allowance to buy a game system that costs $360. How many weeks will it take him to save up enough money for the system? Use a table, tape diagram, or double number line to show your reasoning.

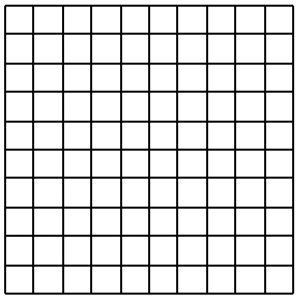
5. Sonia and Carlos are shopping in the grocery store. They see the sign that says "10 pounds of apples for $4.00." Sonia says that the sign means you can get $2\frac{1}{2}$ pounds of apples for one dollar. Carlos says Sonia is wrong and that the sign means it cost $0.40 per one pound of apples. Who is correct Sonia, Carlos or both of them? Explain.

Name _____ Period _____ Date_____

# PERCENTS (PR2)
# Essentials Pre-Assessment

6. The drawing below represents a garden. The shaded part is planted.





   a. What fractional part is planted?

   b. Color the hundred-square so that the same fractional part is planted.

   c. Write the part that is shaded as a decimal, and percent.

7. Complete the table.

| | Fraction | Decimal | Percent |
|---|---|---|---|
| a. | $\frac{3}{4}$ | | |
| b. | | 0.8 | |

8. Change $\frac{2}{7}$ to a decimal.

9. Choose all amounts that are equal to $20.

   A. 10% of $200 B. 20% of $10 C. 50% of $40 D. 25% of $80

10. Selena is buying a soccer jersey for $50. Show work.

| a. If the jersey is on sale for 20% off, how much would the jersey be before sales tax? | b. If sales tax is 5%, how much would the total cost be with sales tax? |
|---|---|
| | |