

Name _____

1. Archie can walk 1 mile in $\frac{1}{3}$ hour. How far can he walk in 3 hours? Explain how you found your answer. **2 points**

9 miles; Sample explanation: I divided 3 by $\frac{1}{3}$.

2. Select all the equations that the number 7 will make true. **1 point**

- $4 \div ? = \frac{4}{7}$
 $? \div 14 = \frac{1}{2}$
 $1 \div 7 = ?$
 $3 \div ? = \frac{7}{3}$
 $9 \div ? = 63$

3. Diana has 9 pounds of potting soil. She is putting $\frac{1}{4}$ pound of soil in each flowerpot. How many flowerpots can Diana fill with soil? Explain how you found your answer. **2 points**

36 flowerpots; Sample explanation: I divided 9 pounds by $\frac{1}{4}$ pound per flowerpot.

4. How many $\frac{1}{9}$ s are in 31? What multiplication equation can you use to check your answer? **2 points**

279; Sample answer: $279 \times \frac{1}{9} = 31$

5. Tomás is cutting a board into $\frac{1}{4}$ -yard pieces. If the board is 3 yards long, how many pieces can Tomás cut? Use the number line. Choose the equation that represents the problem. **1 point**



- (A) $\frac{1}{4} \div 3 = \frac{1}{12}$ (C) $1 \div \frac{1}{4} = 4$
 (B) $\frac{1}{4} \times 3 = \frac{3}{4}$ (D) $3 \div \frac{1}{4} = 12$

6. A baker has 15 cups of flour. He sets aside 4 cups of flour, and uses the rest for a cookie recipe that calls for $\frac{1}{2}$ cup of flour. How many batches of cookies can the baker make? **1 point**

- (A) 11 (C) 22
 (B) 15 (D) 30

7. A relay race is $\frac{1}{4}$ -mile long and is run by 4-member teams. If each team member runs the same distance, what fraction of a mile does each team member run? Explain how you found your answer. **2 points**

$\frac{1}{16}$ mile; Sample explanation: I divided $\frac{1}{4}$ by 4.

8. Jasmine and four friends moved 23 pounds of dirt. Each friend moved the same amount of dirt. Use an equation to find how much dirt each friend moved. **1 point**

Sample answer: $23 \div 5 = 4\frac{3}{5}$ pounds

9. Choose the correct quotient for each expression. **1 point**

	$\frac{2}{9}$	$\frac{1}{18}$	$4\frac{1}{2}$	18
$9 \div 2$	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
$9 \div \frac{1}{2}$	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
$2 \div 9$	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
$\frac{1}{2} \div 9$	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. A. Select all the expressions that are equal to $\frac{1}{5}$. **1 point**

- $2 \div 10$ $2 \div \frac{1}{10}$
 $5 \div 1$ $1 \div \frac{1}{5}$
 $\frac{1}{5} \div 1$

- B. How can you check your answer? **1 point**

Sample answer: I can multiply $\frac{1}{5}$ by the divisor. If the product is equal to the dividend, then the answer is correct.

11. The area of a closet floor is 12 square feet. Mario will be placing $\frac{1}{3}$ -square-foot carpet tiles on the entire floor. How many carpet tiles will Mario use? What equation can you use to check your answer? **2 points**

36 carpet tiles; Sample answer: $? \times \frac{1}{3} = 12$

12. Ivanna says that $2\frac{4}{9}$ equals $9 \div 22$. Is she correct? Explain. **2 points**

No; Sample explanation: Ivanna reversed 9 and 22 in the expression.

$$2\frac{4}{9} = \frac{9}{9} + \frac{9}{9} + \frac{4}{9} = 22 \div 9$$

13. Cho has $\frac{1}{5}$ liter of water. He pours equal amounts of his water into 3 cups. Write an expression for the number of liters of water in each cup and solve. **2 points**

$$\frac{1}{5} \div 3 = \frac{1}{15}$$

14. Look at the equations below.

$$7 \div \frac{1}{4} = \boxed{28}$$

$$5 \div \frac{1}{10} = \boxed{50}$$

$$7 \times 4 = \boxed{28}$$

$$5 \times 10 = \boxed{50}$$

- A. Write numbers in the boxes above to make each equation true. **1 point**
 B. What generalization can you make about the equations? Explain. **1 point**

Sample explanation: Dividing a whole number by a unit fraction is the same as multiplying the whole number by the denominator of the unit fraction.