

Name \_\_\_\_\_

1. Delia brushes her teeth  $\frac{1}{6}$  hour each day.

Units of Time
1 week = 7 days
1 hour = 60 minutes

- A. Write and solve an equation to find how many hours Delia brushes her teeth in 1 week. **2 points**

**Sample answer:**

$$7 \times \frac{1}{6} = \frac{7 \times 1}{6} = \frac{7}{6} \\ = 1\frac{1}{6} \text{ hours}$$

- B. Write and solve an equation to find how many minutes Delia brushes her teeth in 1 day. Then use that to find the number of minutes she brushes her teeth in 1 week. **2 points**

$$60 \times \frac{1}{6} = 60 \times \frac{1}{6} = \\ \frac{60}{6} = 10 \text{ minutes}$$

$$10 \times 7 = 70 \text{ minutes}$$

2. Which of the following represents the fraction  $\frac{5}{3}$  as a multiple of a unit fraction? **1 point**

(A)  $\frac{5}{3} = 3 \times \frac{1}{5}$

(B)  $\frac{5}{3} = 3 \times \frac{2}{3}$

(C)  $\frac{5}{3} = 5 \times \frac{1}{3}$

(D)  $\frac{5}{3} = 1 \times \frac{5}{3}$

3. Tom played basketball for 2 hours 15 minutes. Later he played soccer for 1 hour 5 minutes. He then played football for 30 minutes. How long did Tom play sports in all? **1 point**

(A) 3 hours 35 minutes

(B) 3 hours 20 minutes

(C) 3 hours 50 minutes

(D) 3 hours

4. Choose numbers from the list to fill in the missing values in the multiplication equations. Use each number once. **1 point**

1 2 3 4 5 6 7 8

$$\frac{7}{10} = \boxed{7} \times \frac{\boxed{1}}{10}$$

$$5 \times \frac{1}{\boxed{4}} = \frac{\boxed{5}}{4}$$

$$\frac{\boxed{3}}{6} = 3 \times \frac{1}{\boxed{6}}$$

$$1 \times \frac{2}{8} = \frac{\boxed{2}}{\boxed{8}}$$

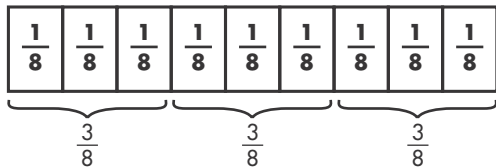
5. Karl found the products of whole numbers and fractions. Match each expression with its product. **1 point**

	$3\frac{6}{8}$	3	$1\frac{1}{2}$	2
$3 \times \frac{2}{3}$	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
$5 \times \frac{6}{8}$	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
$4 \times \frac{3}{4}$	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
$3 \times \frac{1}{2}$	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

6. What is the product of 2 and  $\frac{3}{6}$ ? Write another expression that is equal to the product of 2 and  $\frac{3}{6}$ . **2 points**

**1; Sample answer:  
another expression is  
 $\frac{3}{6} + \frac{3}{6}$**

7. Complete the multiplication equation that describes what is shown by the model. **1 point**



$$3 \times \frac{\boxed{3}}{8} = 9 \times \frac{\boxed{1}}{8}$$

8. Use a unit fraction and a whole number to write a multiplication equation equal to  $\frac{4}{5}$ . **1 point**

$$4 \times \frac{1}{5} = n; n = \frac{4}{5}$$

9. Beth is making brownies. She makes 3 batches of brownies on Saturday and 4 batches on Sunday. She uses  $\frac{1}{4}$  cup of butter in each batch. How much butter does Beth use? Explain. **2 points**

**Sample answer:  $1\frac{3}{4}$  cups;  
 $3 + 4 = 7$  batches;  
 $7 \times \frac{1}{4} = \frac{7}{4}$  or  $1\frac{3}{4}$  cups**

10. Joe uses  $\frac{1}{3}$  yard of wood for each sculpture he makes. He makes 4 sculptures for his grandfather and 2 sculptures for his friend. How many yards of wood did Joe use? **1 point**

- (A)  $1\frac{1}{3}$   
(B) 2  
(C)  $\frac{2}{3}$   
(D) 3

11. Tabitha is making 11 bags of trail mix. She uses  $\frac{2}{4}$  cup of almonds and  $\frac{1}{4}$  cup of pecans for each bag. How many cups of nuts does Tabitha need for her 11 bags of trail mix? Write and solve equations to show how you found your answer. **2 points**

**$8\frac{1}{4}$  cups; Sample answer:  
 $\frac{2}{4} + \frac{1}{4} = \frac{3}{4}$  cup of nuts  
per bag.  $11 \times \frac{3}{4} = \frac{33}{4}$   
or  $8\frac{1}{4}$  cups**