

# Chapter 6 Review/Test



**Personal Math Trainer**

Online Assessment and Intervention

1. For numbers 1a-1d, tell whether the fractions are equivalent by selecting the correct symbol.

1a.  $\frac{4}{16}$   =  $\frac{1}{4}$   
  $\neq$

1c.  $\frac{5}{6}$   =  $\frac{25}{30}$   
  $\neq$

1b.  $\frac{3}{5}$   =  $\frac{12}{15}$   
  $\neq$

1d.  $\frac{6}{10}$   =  $\frac{5}{8}$   
  $\neq$

2. Juan's mother gave him a recipe for trail mix.

$\frac{3}{4}$ cup cereal	$\frac{2}{3}$ cup almonds
$\frac{1}{4}$ cup peanuts	$\frac{1}{2}$ cup raisins

Order the ingredients used in the recipe from least to greatest.

--	--	--	--

3. Taylor cuts  $\frac{1}{5}$  sheet of construction paper for an arts and crafts project. Write  $\frac{1}{5}$  as an equivalent fraction with the denominators shown.

<input type="text"/> <hr style="width: 100%;"/> 10	<input type="text"/> <hr style="width: 100%;"/> 15	<input type="text"/> <hr style="width: 100%;"/> 25	<input type="text"/> <hr style="width: 100%;"/> 40
--	--	--	--

4. A mechanic has sockets with the sizes shown below. Write each fraction in the correct box.

$\frac{7}{8}$  in.     $\frac{3}{16}$  in.     $\frac{1}{4}$  in.     $\frac{3}{8}$  in.     $\frac{4}{8}$  in.     $\frac{11}{16}$  in.

less than $\frac{1}{2}$ in.	equal to $\frac{1}{2}$ in.	greater than $\frac{1}{2}$ in.

5. Darcy bought  $\frac{1}{2}$  pound of cheese and  $\frac{3}{4}$  pound of hamburger for a barbecue. Use the numbers to compare the amounts of cheese and hamburger Darcy bought.

	<		1	3
			2	4

6. Brad is practicing the piano. He spends  $\frac{1}{4}$  hour practicing scales and  $\frac{1}{3}$  hour practicing the song for his recital. For numbers 6a–6c, select Yes or No to tell whether each of the following is a true statement.

- 6a. 12 is a common denominator of  $\frac{1}{4}$  and  $\frac{1}{3}$ .  Yes  No
- 6b. The amount of time spent practicing scales can be rewritten as  $\frac{3}{12}$ .  Yes  No
- 6c. The amount of time spent practicing the song for the recital can be rewritten as  $\frac{6}{12}$ .  Yes  No
7. In the school chorus,  $\frac{4}{24}$  of the students are fourth graders. In simplest form, what fraction of the students in the school chorus are fourth graders?

\_\_\_\_\_ of the students

8. Which pairs of fractions are equivalent? Mark all that apply.

- |   |  |
|---|--|
| <input type="radio"/> $\frac{8}{12}$ and $\frac{2}{3}$  | <input type="radio"/> $\frac{4}{5}$ and $\frac{12}{16}$  |
| <input type="radio"/> $\frac{3}{4}$ and $\frac{20}{28}$ | <input type="radio"/> $\frac{7}{10}$ and $\frac{21}{30}$ |

9. Sam worked on his science fair project for  $\frac{1}{4}$  hour on Friday and  $\frac{1}{2}$  hour on Saturday. What are four common denominators for the fractions? Explain your reasoning.

Name \_\_\_\_\_

10. Morita works in a florist shop and makes flower arrangements. She puts 10 flowers in each vase, and  $\frac{2}{10}$  of the flowers are daisies.

**Part A**

If Morita makes 4 arrangements, how many daisies does she need? Show how you can check your answer.

\_\_\_\_\_ daisies

**Part B**

Last weekend, Morita used 10 daisies to make flower arrangements. How many flowers other than daisies did she use to make the arrangements? Explain your reasoning.

\_\_\_\_\_ other flowers

**Personal Math Trainer**



11. **THINK SMARTER +** In Mary's homeroom,  $\frac{10}{28}$  of the students have a cat,  $\frac{6}{12}$  have a dog, and  $\frac{2}{14}$  have a pet bird. For numbers 11a-11c, select True or False for each statement.

- 11a. In simplest form,  $\frac{5}{14}$  of the students have a cat.  True  False
- 11b. In simplest form,  $\frac{2}{4}$  of the students have a dog.  True  False
- 11c. In simplest form,  $\frac{1}{7}$  of the students have a pet bird.  True  False

12. Regina, Courtney, and Ellen hiked around Bear Pond. Regina hiked  $\frac{7}{10}$  of the distance in an hour. Courtney hiked  $\frac{3}{6}$  of the distance in an hour. Ellen hiked  $\frac{3}{8}$  of the distance in an hour. Compare the distances hiked by each person by matching the statements to the correct symbol. Each symbol may be used more than once or not at all.

$\frac{7}{10}$ ● $\frac{3}{6}$ ●	$\bullet <$
$\frac{3}{8}$ ● $\frac{3}{6}$ ●	$\bullet >$
$\frac{7}{10}$ ● $\frac{3}{8}$ ●	$\bullet =$

13. Ramon is having some friends over after a baseball game. Ramon's job is to make a vegetable dip. The ingredients for the recipe are given.

<b>Ingredients in Vegetable Dip</b>	
$\frac{3}{4}$ cup parsley	$\frac{5}{8}$ cup buttermilk
$\frac{1}{3}$ cup dill	$\frac{1}{2}$ cup cream cheese
$\frac{6}{8}$ cup scallions	$\frac{1}{16}$ cup lemon juice

**Part A**

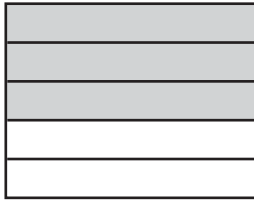
Which ingredient does Ramon use the greater amount of, buttermilk or cream cheese? Explain how you found your answer.

**Part B**

Ramon says that he needs the same amount of two different ingredients. Is he correct? Support your answer with information from the problem.

Name \_\_\_\_\_

14. Sandy is ordering bread rolls for her party. She wants  $\frac{3}{5}$  of the rolls to be whole wheat. What other fractions can represent the part of the rolls that will be whole wheat? Shade the models to show your work.



$\frac{3}{5}$

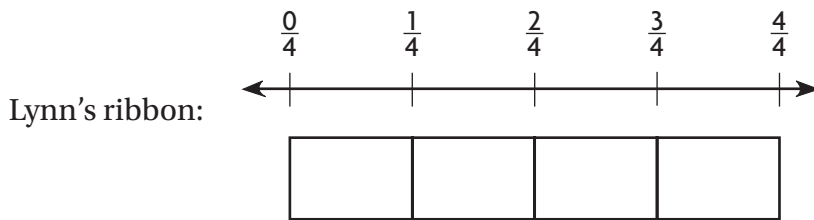
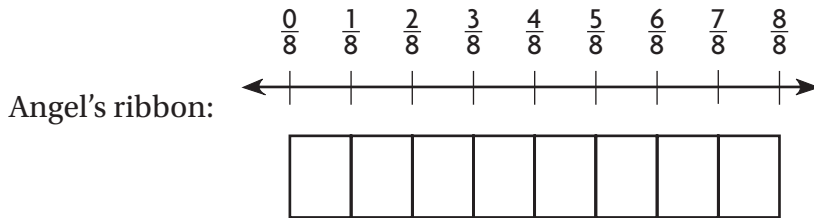


$\frac{\square}{25}$



$\frac{\square}{\square}$

15. Angel has  $\frac{4}{8}$  yard of ribbon and Lynn has  $\frac{3}{4}$  yard of ribbon. Do Angel and Lynn have the same amount of ribbon? Shade the model to show how you found your answer. Explain your reasoning.



16. Ella used  $\frac{1}{4}$  yard of red ribbon. Fill in each box with a number from the list to show equivalent fractions for  $\frac{1}{4}$ . Not all numbers will be used.

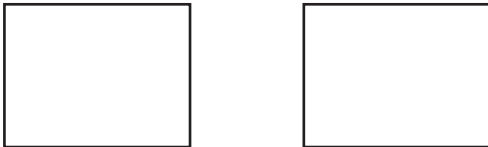
$$\frac{1}{4} = \frac{\square}{8} = \frac{4}{\square} = \frac{\square}{\square}$$

- |    |    |    |    |
|----|----|----|----|
| 2  | 3  | 5  | 6  |
| 12 | 15 | 16 | 20 |

17. **GO DEEPER** Frank has two same-size rectangles divided into the same number of equal parts. One rectangle has  $\frac{3}{4}$  of the parts shaded, and the other has  $\frac{1}{3}$  of the parts shaded.

**Part A**

Into how many parts could each rectangle be divided? Show your work by drawing the parts of each rectangle.



**Part B**

Is there more than one possible answer to Part A? If so, did you find the least number of parts into which both rectangles could be divided? Explain your reasoning.

18. Suki rode her bike  $\frac{4}{5}$  mile. Claire rode her bike  $\frac{1}{3}$  mile. They want to compare how far they each rode their bikes using the benchmark  $\frac{1}{2}$ . For numbers 18a–18c, select the correct answers to describe how to solve the problem.

18a. Compare Suki's distance to the benchmark:  $\frac{4}{5}$  
 $<$   
 $>$   
 $=$ 
  $\frac{1}{2}$ .

18b. Compare Claire's distance to the benchmark:  $\frac{1}{3}$  
 $<$   
 $>$   
 $=$ 
  $\frac{1}{2}$ .

18c. Suki rode her bike 
 a longer distance than  
 the same distance as  
 a shorter distance than
  Claire.