

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

1a.  $\frac{3}{8}$ 

=
≠

 $\frac{12}{24}$

1c.  $\frac{6}{20}$ 

=
≠

 $\frac{3}{10}$

1b.  $\frac{6}{7}$ 

=
≠

 $\frac{18}{21}$

1d.  $\frac{12}{16}$ 

=
≠

 $\frac{3}{5}$

2. The table shows the distances of some places in town from the school.

Distance from School	
Place	Distance
Library	$\frac{3}{5}$ mile
Post Office	$\frac{1}{2}$ mile
Park	$\frac{3}{4}$ mile
Town Hall	$\frac{8}{10}$ mile

From least to greatest, order the locations by their distance from school.

3. Nicolette needs  $\frac{1}{3}$  yard of fabric for her quilt. Write  $\frac{1}{3}$  as an equivalent fraction with the denominators shown.

 $\frac{\square}{6}$ 
 $\frac{\square}{9}$ 
 $\frac{\square}{12}$ 
 $\frac{\square}{18}$ 

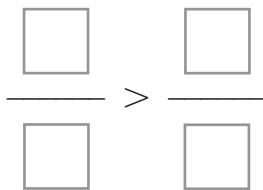
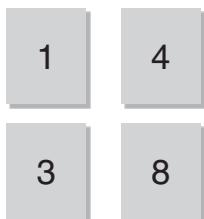
4. Juan has wrenches with the sizes shown below. Write each fraction in the correct box.

$\frac{1}{8}$  in.    $\frac{5}{8}$  in.    $\frac{8}{16}$  in.    $\frac{9}{16}$  in.    $\frac{15}{16}$  in.    $\frac{5}{16}$  in.

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

**GO ON** 

5. Cassie bought  $\frac{3}{8}$  pound of peanuts and  $\frac{1}{4}$  pound of cashews to make mixed nuts. Use the numbers to compare the amounts of peanuts and cashews Cassie bought.



6. Elise is doing her homework. She spends  $\frac{1}{3}$  hour on math homework and  $\frac{1}{5}$  hour on spelling words. For numbers 6a–6c, select Yes or No to tell whether each of the following is a true statement.

6a. 15 is a common denominator of  $\frac{1}{3}$  and  $\frac{1}{5}$ .  Yes  No

6b. The amount of time spent on math homework can be rewritten as  $\frac{1}{15}$ .  Yes  No

6c. The amount of time spent on spelling words can be rewritten as  $\frac{3}{15}$ .  Yes  No

7. In the school band,  $\frac{6}{24}$  of the members play the trumpet. In simplest form, what fraction of the band plays the trumpet?

\_\_\_\_\_ of the band

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

$\frac{4}{5}$  and  $\frac{8}{12}$    $\frac{2}{3}$  and  $\frac{10}{15}$

$\frac{1}{6}$  and  $\frac{3}{18}$    $\frac{2}{7}$  and  $\frac{6}{20}$

9. Allie worked for  $\frac{1}{2}$  hour on Saturday and  $\frac{2}{3}$  hour on Sunday. What are four common denominators for the fractions? Explain your reasoning.

GO ON 

10. Liam works in a toy store that sells bags of marbles. He puts 10 marbles in each bag, and  $\frac{4}{10}$  of the marbles are striped.

**Part A**

If Liam makes 3 bags of marbles, how many striped marbles does he need? Show how you can check your answer.

\_\_\_\_\_ striped marbles

**Part B**

Yesterday Liam used 20 striped marbles to fill bags. How many non-striped marbles did he use to fill the bags? Explain your reasoning.

\_\_\_\_\_ non-striped marbles

11. In Jason's homeroom,  $\frac{8}{30}$  of the students like soccer best,  $\frac{6}{15}$  like volleyball best, and  $\frac{5}{15}$  like baseball best. For numbers 11a–11c, select True or False for each statement.

11a. In simplest form,  $\frac{2}{15}$  of the students like soccer best.  True  False

11b. In simplest form,  $\frac{3}{5}$  of the students like volleyball best.  True  False

11c. In simplest form,  $\frac{1}{3}$  of the students like baseball best.  True  False

GO ON

12. Edgar, Jack, and Katie walked around Woodbury Lake. Edgar walked  $\frac{3}{5}$  of the distance in an hour. Jack walked  $\frac{3}{4}$  of the distance in an hour. Ellen walked  $\frac{6}{8}$  of the distance in an hour. Compare the distances walked by each person by matching the statements to the correct symbol. Each symbol may be used more than once or not at all.

$$\frac{3}{5} \bigcirc \frac{3}{4} \bullet \quad \bullet <$$

$$\frac{6}{8} \bigcirc \frac{3}{4} \bullet \quad \bullet >$$

$$\frac{3}{5} \bigcirc \frac{6}{8} \bullet \quad \bullet =$$

13. Olivia is using her grandmother's chili recipe. Some of the ingredients for the recipe are given.

**Chili Recipe**

$\frac{1}{2}$ cup chopped onion	$\frac{1}{4}$ cup diced green pepper
$\frac{7}{8}$ cup tomato sauce	$\frac{3}{4}$ cup tomato soup
$\frac{5}{6}$ cup tomato puree	$\frac{3}{6}$ cup salsa

**Part A**

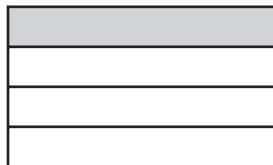
Which ingredient does Olivia use the greater amount of, tomato sauce or tomato soup? Explain how you found your answer.

**Part B**

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

**GO ON** 

14. Craig is tiling the floor of his bathroom. He wants  $\frac{1}{4}$  of the tiles to be brown. What other fractions can represent the part of the tiles that will be brown? Shade the models to show your work.



$$\frac{1}{4}$$



$$\frac{\square}{20}$$



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

15. Georgina has  $\frac{3}{8}$  yard of blue fabric and  $\frac{1}{4}$  yard of red fabric. Does she have the same amount of blue and red fabric? Shade the model to show how you found your answer. Explain your reasoning.

$$\frac{0}{8} \quad \frac{1}{8} \quad \frac{2}{8} \quad \frac{3}{8} \quad \frac{4}{8} \quad \frac{5}{8} \quad \frac{6}{8} \quad \frac{7}{8} \quad \frac{8}{8}$$

blue fabric: ← | | | | | | | | →



$$\frac{0}{4} \quad \frac{1}{4} \quad \frac{2}{4} \quad \frac{3}{4} \quad \frac{4}{4}$$

red fabric: ← | | | | →



16. Martin fills an aquarium  $\frac{4}{5}$  full of water. Fill in each box with a number from the list to generate equivalent fractions for  $\frac{4}{5}$ . Not all numbers will be used.

5	6	8	10
12	15	20	25

$$\frac{4}{5} = \frac{\square}{10} = \frac{12}{\square} = \frac{\square}{\square}$$

GO ON

**17.** Henry has two same-size rectangles divided into the same number of equal parts. One rectangle has  $\frac{2}{5}$  of the parts shaded, and the other has  $\frac{1}{2}$  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.** Ann runs  $\frac{2}{5}$  mile. Kim runs  $\frac{3}{4}$  mile. They want to compare how far they each ran using the benchmark  $\frac{1}{2}$ . For numbers 18a–18c, select the correct answers to describe how to solve the problem.

18a. Compare Ann's distance to the benchmark:  $\frac{2}{5}$    $\frac{1}{2}$ .

<
>
=

18b. Compare Kim's distance to the benchmark:  $\frac{3}{4}$    $\frac{1}{2}$ .

<
>
=

18c. Ann ran  the same distance as Kim.

farther than

the same distance as

less than

