

# Unit 5 Practice Test

For each problem, find a common denominator and write which strategy you used. Then write the fractions using a common denominator and solve.

1  $\frac{2}{3}$  and  $\frac{10}{15}$

a. Strategy: \_\_\_\_\_

b. Fractions with a common denominator: \_\_\_\_\_ and \_\_\_\_\_

c.  $\frac{2}{3} + \frac{10}{15} =$  \_\_\_\_\_

d. Fill in the blank with  $<$ ,  $>$ , or  $=$ :  $\frac{2}{3}$  \_\_\_\_\_  $\frac{10}{15}$

2  $\frac{1}{4}$  and  $\frac{2}{9}$

a. Strategy: \_\_\_\_\_

b. Fractions with a common denominator: \_\_\_\_\_ and \_\_\_\_\_

c.  $\frac{1}{4} - \frac{2}{9} =$  \_\_\_\_\_

d. Fill in the blank with  $<$ ,  $>$ , or  $=$ :  $\frac{1}{4}$  \_\_\_\_\_  $\frac{2}{9}$

3  $\frac{5}{6}$  and  $\frac{3}{4}$

a. Strategy: \_\_\_\_\_

b. Fractions with a common denominator: \_\_\_\_\_ and \_\_\_\_\_

c.  $\frac{5}{6} + \frac{3}{4} =$  \_\_\_\_\_

d.  $\frac{5}{6} - \frac{3}{4} =$  \_\_\_\_\_

Estimate each sum and then solve. Show your work.

4 
$$\begin{array}{r} 2\frac{4}{5} \\ + 1\frac{2}{3} \\ \hline \end{array}$$

about 3

a little less than 4

between 4 and 5

5 Estimate: \_\_\_\_\_

$$\begin{array}{r} 3\frac{1}{3} \\ - 1\frac{1}{2} \\ \hline \end{array}$$

6 Estimate: \_\_\_\_\_

$$\begin{array}{r} 10\frac{1}{5} \\ - 4\frac{2}{3} \\ \hline \end{array}$$

Katie is training to run a marathon. She keeps track of how many miles she runs each day.

Use the information in the table to answer the questions.

Training Day	Number of Miles
1	$8\frac{1}{8}$
2	$4\frac{3}{8}$
3	$12\frac{3}{4}$
4	$5\frac{1}{3}$
5	$9\frac{1}{8}$

- ⑦ How many more miles did Katie run on Day 1 than on Day 2?

Number model: \_\_\_\_\_

Estimate: \_\_\_\_\_

Show your work:

Answer: \_\_\_\_\_ miles

How many miles did Katie run on Day 3 and Day 4 combined?

Number model: \_\_\_\_\_

Estimate: \_\_\_\_\_

Show your work:

Answer: \_\_\_\_\_ miles

- ⑧ a. What is  $\frac{1}{6}$  of 18? \_\_\_\_\_

- b. What is  $\frac{4}{6}$  of 18? \_\_\_\_\_

- c. Fill in the blank to make a true number sentence.

$$18 * \frac{4}{6} = \underline{\hspace{2cm}}$$

In Problems 9–12, write true or false. Do not multiply.

- ⑨  $\frac{3}{4} * \frac{7}{10}$  is less than  $\frac{3}{4}$ . \_\_\_\_\_

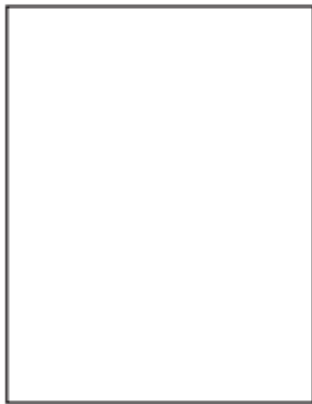
- ⑩  $\frac{7}{9} * \frac{11}{12}$  is greater than  $\frac{11}{12}$ . \_\_\_\_\_

- ⑪  $\frac{4}{5} * \frac{2}{8}$  is greater than  $\frac{2}{8}$  but less than  $\frac{4}{5}$ . \_\_\_\_\_

- ⑫  $\frac{6}{7} * \frac{1}{4}$  is less than  $\frac{6}{7}$  and less than  $\frac{1}{4}$ . \_\_\_\_\_

13 What is  $\frac{3}{4}$  of  $\frac{2}{3}$ ?

- a. Fold the paper into thirds. Unfold it and shade two of the thirds.
- b. Fold the paper into fourths the other way, with the new folds crossing your folds from Part a. Unfold the paper and double-shade three-fourths of the shaded part.
- c. Record what your paper looks like.



- d. How much of the paper is double-shaded? \_\_\_\_\_
- e. Fill in the blank:  $\frac{3}{4}$  of  $\frac{2}{3}$  is \_\_\_\_\_.

15 Write two different number stories that can be solved by multiplying  $\frac{3}{4}$  by 8. Draw a picture to represent each story.

Number story #1: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

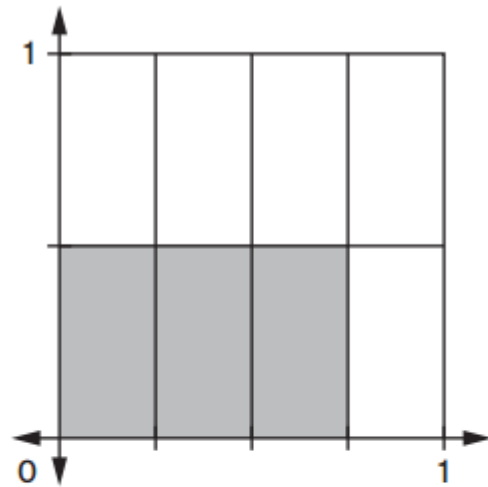
Number story #2: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

14



Length of shaded rectangle: \_\_\_\_\_ unit

Width of shaded rectangle: \_\_\_\_\_ unit

Area of shaded rectangle: \_\_\_\_\_ square unit

Number sentence: \_\_\_\_\_  $\times$  \_\_\_\_\_ = \_\_\_\_\_

Use the fraction multiplication algorithm

⑩  $\frac{2}{8} * \frac{5}{6} = \underline{\hspace{2cm}}$

⑪  $\frac{5}{12} * \frac{2}{7} = \underline{\hspace{2cm}}$

Write a number model using a letter for the unknown. Solve, showing your solution strategy with representations or drawings. Summarize your work with a division number model. Check your answer using multiplication and write a number sentence to show how you checked.

- ⑫ Ben has  $\frac{1}{2}$  of a loaf of bread. If he and his 3 friends share the  $\frac{1}{2}$  loaf equally, how much of the whole loaf will each person get?

Number model: \_\_\_\_\_

Each person will get \_\_\_\_\_ loaf of bread.

\_\_\_\_\_  
(summary number model)

\_\_\_\_\_  
(check using multiplication)

- ⑬ Charity is packing a 2-pound container of trail mix into bags for a camping trip. Each bag holds  $\frac{1}{8}$  pound of trail mix. If Charity uses all 2 pounds of trail mix, how many  $\frac{1}{8}$ -pound bags will she have?

Number model: \_\_\_\_\_

Charity will have \_\_\_\_\_  $\frac{1}{8}$ -pound bags.

\_\_\_\_\_  
(summary number model)

\_\_\_\_\_  
(check using multiplication)