

## Chapter

## 3

# Fractions and Mixed Numbers

## Practice 1 Adding Unlike Fractions

Find two equivalent fractions for each fraction.

Example

$$\frac{2}{3} = \frac{4}{6} = \frac{6}{9}$$

1.  $\frac{3}{4} =$  \_\_\_\_\_  $=$  \_\_\_\_\_

2.  $\frac{2}{5} =$  \_\_\_\_\_  $=$  \_\_\_\_\_

3.  $\frac{5}{6} =$  \_\_\_\_\_  $=$  \_\_\_\_\_

4.  $\frac{1}{7} =$  \_\_\_\_\_  $=$  \_\_\_\_\_

Express each fraction in simplest form.

5.  $\frac{6}{8} =$  \_\_\_\_\_

6.  $\frac{8}{20} =$  \_\_\_\_\_

7.  $\frac{10}{15} =$  \_\_\_\_\_

8.  $\frac{9}{21} =$  \_\_\_\_\_

**Rewrite each pair of unlike fractions as like fractions.**

*Example*

$$\frac{1}{2} = \frac{2}{4} \quad \frac{1}{4} = \frac{1}{4}$$

9.  $\frac{1}{4} =$  \_\_\_\_\_  $\frac{5}{12} =$  \_\_\_\_\_

10.  $\frac{1}{10} =$  \_\_\_\_\_  $\frac{2}{5} =$  \_\_\_\_\_

11.  $\frac{5}{9} =$  \_\_\_\_\_  $\frac{2}{3} =$  \_\_\_\_\_

12.  $\frac{3}{8} =$  \_\_\_\_\_  $\frac{9}{16} =$  \_\_\_\_\_

**Write equivalent fractions for each fraction. Then find the least common denominator of the fractions.**

*Example*

$$\frac{1}{2} = \frac{2}{4} = \frac{3}{6}$$

$$\frac{2}{3} = \frac{4}{6}$$

The least common denominator  
is 6.

13.  $\frac{2}{3} =$  \_\_\_\_\_

$$\frac{3}{4} =$$

The least common denominator  
is \_\_\_\_\_.

14.  $\frac{1}{4} =$  \_\_\_\_\_

$$\frac{5}{6} =$$

The least common denominator  
is \_\_\_\_\_.

15.  $\frac{5}{6} =$  \_\_\_\_\_

$$\frac{3}{8} =$$

The least common denominator  
is \_\_\_\_\_.

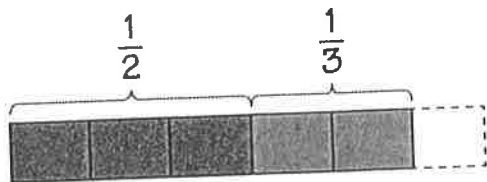
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Shade and label each model to show the fractions. Then complete the addition sentence.

Example

$$\frac{1}{2}, \frac{1}{3}$$

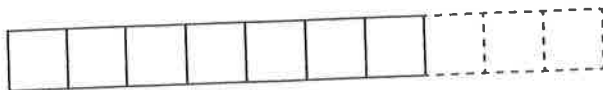


Find the multiples of 2 and 3.  
Choose the least common multiple.  
Use it to rewrite  $\frac{1}{2}$  and  $\frac{1}{3}$  as like fractions.

$$\frac{1}{2} + \frac{1}{3} = \frac{3}{6} + \frac{2}{6}$$

$$= \frac{5}{6}$$

16.  $\frac{1}{5}, \frac{1}{2}$



$$\frac{1}{5} + \frac{1}{2} = \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$$

$$= \underline{\hspace{2cm}}$$

**Shade and label each model to show the fractions. Then complete the addition sentence.**

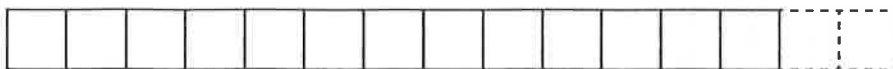
**17.**  $\frac{1}{6}, \frac{1}{4}$



$$\frac{1}{6} + \frac{1}{4} = \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$$

$$= \underline{\hspace{2cm}}$$

**18.**  $\frac{1}{5}, \frac{2}{3}$



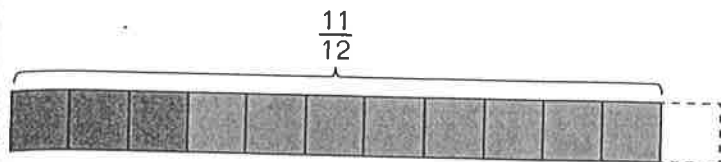
$$\frac{1}{5} + \frac{2}{3} = \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$$

$$= \underline{\hspace{2cm}}$$

Name: \_\_\_\_\_

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**Look at the model. Write two addition sentences.**



**19.** Addition sentence 1:

$$\frac{\square}{12} + \frac{\square}{12} = \frac{\square}{12}$$

**20.** Addition sentence 2 (fractions in simplest form):

$$\underline{\hspace{2cm}} + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

**Add. Express each sum in simplest form.**

**21.**  $\frac{1}{3} + \frac{1}{9} =$

**22.**  $\frac{5}{8} + \frac{2}{4} =$

**23.**  $\frac{1}{2} + \frac{6}{7} =$

**24.**  $\frac{4}{8} + \frac{1}{5} =$

**Use benchmarks to estimate each sum.**

*Example*

$$\frac{1}{3} + \frac{4}{7}$$

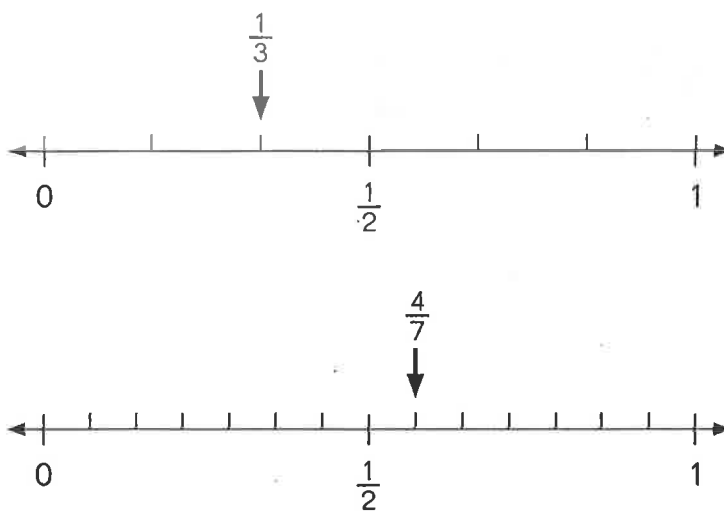
$\frac{1}{3}$  is about  $\frac{1}{2}$ .

$\frac{4}{7}$  is about  $\frac{1}{2}$ .

$$\frac{1}{3} + \frac{4}{7}$$

$$\rightarrow \frac{1}{2} + \frac{1}{2} = 1$$

$\frac{1}{3} + \frac{4}{7}$  is about 1.



**25.**  $\frac{2}{3} + \frac{2}{9}$

**26.**  $\frac{7}{9} + \frac{1}{7} + \frac{3}{5}$