

# 3.4

## Multiplying Fractions by Whole Numbers

### • Example 1

Do the indicated multiplication.

Remember that  $5 = \frac{5}{1}$ .

$$5 \times \frac{3}{4} = \frac{5}{1} \times \frac{3}{4} = \frac{5 \times 3}{1 \times 4}$$
$$= \frac{15}{4} = 3\frac{3}{4}$$

We have written the resulting improper fraction as a mixed number.

### • • • CHECK YOURSELF 1

Multiply.

$$\frac{3}{16} \times 8$$

### • Example 2

Do the indicated multiplication.

$$\frac{5}{12} \times 6 = \frac{5}{12} \times \frac{6}{1}$$
$$= \frac{5 \times 6}{12 \times 1}$$
$$= \frac{30}{12} = 2\frac{6}{12}$$
$$= 2\frac{1}{2}$$

Write the product as a mixed number, then reduce the fractional portion to simplest form.

### • • • CHECK YOURSELF 2

Multiply.

$$4 \times \frac{5}{7}$$

### • • • CHECK YOURSELF ANSWERS

1.  $1\frac{1}{2}$ .    2.  $2\frac{6}{7}$ .

# 3.4 Exercises

Name \_\_\_\_\_

Section \_\_\_\_\_

Date \_\_\_\_\_

## A N S W E R S

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

7. \_\_\_\_\_

8. \_\_\_\_\_

9. \_\_\_\_\_

10. \_\_\_\_\_

Multiply.

1.  $5 \times \frac{4}{7}$

2.  $\frac{7}{9} \times 5$

3.  $\frac{3}{7} \times 14$

4.  $9 \times \frac{5}{6}$

5.  $15 \times \frac{5}{6}$

6.  $\frac{7}{8} \times 16$

7.  $\frac{3}{5} \times 11$

8.  $6 \times \frac{5}{8}$

9.  $14 \times \frac{3}{8}$

10.  $12 \times \frac{5}{18}$