



# Additional Practice 8-1

## Multiply a Fraction by a Whole Number

### Another Look!

Juan needs  $\frac{3}{4}$  yard of fabric to make a pillowcase. How many yards of fabric will Juan need to sew 5 pillowcases?



Multiply the whole number by the numerator.

$$5 \times 3 = 15$$

Write the product over the denominator.

$$\frac{15}{4} = 3\frac{3}{4}$$

Juan will need  $3\frac{3}{4}$  yards of fabric.

Remember: You can check your answer using repeated addition.



**Leveled Practice** In 1–11, find each product. Use models to help.

$$1. 72 \times \frac{5}{12} = \square \times 5 \times \frac{1}{12} = \frac{\square \times 1}{12} = \frac{360}{\square} = \square$$

$$2. 35 \times \frac{2}{5} = \square \times 2 \times \frac{1}{\square} = \frac{\square \times 1}{5} = \frac{\square}{\square} = \square$$

$$3. 12 \times \frac{3}{4} = \frac{\square}{\square} + \frac{\square}{\square} + \frac{\square}{\square} + \frac{\square}{\square} + \frac{\square}{\square} + \frac{\square}{\square} + \frac{\square}{\square} + \frac{\square}{\square} + \frac{\square}{\square} + \frac{\square}{\square} + \frac{\square}{\square} + \frac{\square}{\square} = \frac{\square}{4} = \square$$

$$4. 13 \times \frac{2}{3}$$

$$5. 70 \times \frac{9}{10}$$

$$6. 81 \times \frac{2}{9}$$

$$7. 57 \times \frac{2}{3}$$

$$8. 600 \times \frac{3}{10}$$

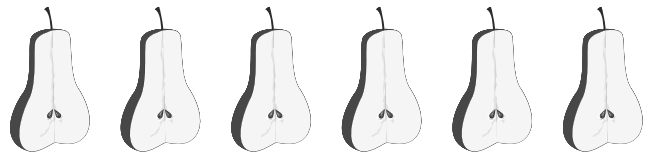
$$9. 16 \times \frac{3}{5}$$

$$10. 400 \times \frac{1}{4}$$

$$11. 48 \times \frac{5}{6}$$



12. Look at the picture. Write and solve an equation to model the picture. Show your answer as a multiplication equation with  $\frac{1}{2}$  as a factor.



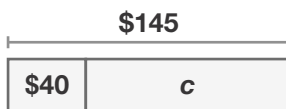
13. **Higher Order Thinking** Explain how you would find  $45 \times \frac{7}{9}$  mentally.

14. **Construct Arguments** Do you think the difference  $2.99 - 0.01$  is greater than 3 or less than 3? Explain.

15. Yara saved \$440. She spent  $\frac{3}{4}$  of it on a tablet. How much money did Yara spend on the tablet?

16. Write a multiplication expression that shows  $10^5$ .

17. **Algebra** Tina had \$145. She spent \$40 on fruit at the farmer's market. Solve the equation  $40 + c = 145$  to find the amount Tina has left.



18. Hippos spend most of their day in water. How many hours a day does a hippo spend in water?



Hippos spend about  $\frac{2}{3}$  of their day in water.



### Assessment Practice

19. Select all equations that would be made true with the number 34.

- ☐  $\square \times \frac{1}{2} = 17$   
☐  $51 \times \frac{2}{3} = \square$   
☐  $\square \times \frac{3}{8} = 12$   
☐  $300 \times \frac{1}{9} = \square$

20. Select all equations that would be made true with the fraction  $\frac{2}{9}$ .

- ☐  $81 \times \square = 18$   
☐  $900 \times \square = 200$   
☐  $72 \times \square = 16$   
☐  $450 \times \square = 100$