



Additional Practice 8-3 Multiply Fractions and Whole Numbers

Another Look!

Lorena has a 16-inch long scarf, and $\frac{2}{3}$ of its length is red.
How many inches long is the red section of the scarf?

Since you are multiplying
16 by a fraction less than 1,
the answer will be less than 16.



Step 1

Multiply.

$$\frac{2}{3} \times 16 = \frac{2 \times 16}{3} = \frac{32}{3}$$

Step 2

Rewrite as a mixed number.

$$\frac{32}{3} = 10\frac{2}{3}$$

Step 3

Answer the question.

The red section of the scarf
is $10\frac{2}{3}$ inches long.

Leveled Practice In 1–16, find each product. Write each product as a mixed number.

$$1. 26 \times \frac{3}{4} = \frac{\square \times \square}{\square} = \frac{\square}{\square} = \square \frac{\square}{\square}$$

$$2. 9 \times \frac{7}{10} = \frac{\square \times \square}{\square} = \frac{\square}{\square} = \square \frac{\square}{\square}$$

$$3. \frac{2}{5} \times 32 = \frac{\square \times \square}{\square} = \frac{\square}{\square} = \square \frac{\square}{\square}$$

$$4. \frac{1}{8} \times 400 = \frac{\square \times \square}{\square} = \frac{\square}{\square} = \square$$

$$5. 15 \times \frac{4}{5}$$

$$6. \frac{3}{11} \times 66$$

$$7. 45 \times \frac{3}{8}$$

$$8. \frac{3}{10} \times 12$$

$$9. 55 \times \frac{2}{5}$$

$$10. \frac{5}{6} \times 40$$

$$11. \frac{7}{9} \times 54$$

$$12. 600 \times \frac{5}{12}$$

$$13. \frac{2}{3} \times 21$$

$$14. 500 \times \frac{3}{5}$$

$$15. 72 \times \frac{5}{8}$$

$$16. \frac{2}{9} \times 35$$



17. Find $6 \times \frac{3}{5}$. Use the model at the right to find the product.

18. What mixed number represents the part of the model you did **NOT** shade for Exercise 17?

19. Without multiplying, tell which is greater: 0.75×81 or 0.9×81 . Explain.

20. **Use Structure** Without multiplying, tell which is greater: $\frac{4}{5} \times 45$ or $\frac{2}{3} \times 45$. Explain.

21. **Higher Order Thinking** The school library has 2,469 books. Two-thirds of the books are paperbacks. How many books are paperbacks?

How can you use estimation to check that your answer is reasonable?



22. The table shows the amount of apple sauce made from one apple of each size. Patrice has 17 medium apples and 23 large apples. What is the total amount of applesauce that she can make with these apples?

DATA	Apple Size	Amount of Applesauce
	Small	$\frac{1}{3}$ cup
	Medium	$\frac{1}{2}$ cup
	Large	$\frac{3}{4}$ cup

Assessment Practice

23. Select all that are true.

- ☐ $\frac{4}{9} \times 3 = \frac{4}{27}$
- ☐ $72 \times \frac{4}{9} = 32$
- ☐ $14 \times \frac{2}{7} = \frac{1}{49}$
- ☐ $15 \times \frac{3}{5} = 9$

24. Select all that are true.

- ☐ $6 \times \frac{3}{5} = \frac{1}{10}$
- ☐ $\frac{7}{8} \times 13 = \frac{7}{104}$
- ☐ $\frac{7}{8} \times 28 = 24\frac{1}{2}$
- ☐ $56 \times \frac{5}{9} = 31\frac{1}{9}$