Skill and Concept Check

1. **OPEN ENDED** Write a pair of fractions whose product is $\frac{8}{15}$.

2. **Which One Doesn't Belong?** Identify the expression that does not have the same value as the other three. Explain your reasoning.

| $\frac{1}{5}$ of 25 | $25 \times \frac{1}{5}$ | $5 \div 25$ | $\frac{1}{5} \cdot \frac{25}{1}$ |

3. **NUMBER SENSE** Is $18 \times \frac{4}{5}$ *greater than, less than,* or *equal to* 18? Explain.

GUIDED PRACTICE

Multiply. Write in simplest form.

4. $\frac{2}{3} \times \frac{1}{3}$

5. $\frac{1}{2} \times \frac{2}{5}$

6. $-\frac{2}{3} \times \frac{3}{8}$

7. $-\frac{1}{6} \times 4$

8. $2\frac{1}{4} \times \frac{2}{3}$

9. $1\frac{5}{6} \times 3\frac{3}{5}$

10. **FOOD** An average slice of American cheese is about $\frac{1}{8}$ inch thick. What is the height of a package containing 20 slices?

Practice and Applications

Multiply. Write in simplest form.

11. $\frac{3}{4} \times \frac{1}{8}$

12. $\frac{2}{5} \times \frac{2}{3}$

13. $\frac{1}{5} \times \frac{5}{6}$

14. $\frac{4}{9} \times \frac{1}{4}$

15. $-\frac{2}{3} \times \frac{1}{4}$

16. $-\frac{1}{12} \times \frac{3}{5}$

17. $\frac{4}{7} \times \frac{7}{8}$

18. $\frac{2}{5} \times \frac{15}{16}$

19. $\frac{3}{8} \times \frac{10}{27}$

20. $\frac{9}{10} \times \frac{5}{6}$

21. $-9 \times \left(-\frac{1}{2}\right)$

22. $-\frac{4}{5} \times (-6)$

23. **ELECTIONS** In an election in which 4,500 votes were cast, one candidate received $\frac{3}{5}$ of the votes. How many votes did the candidate receive?

24. **PACKAGING** The plastic cases used to store compact disks and DVDs are about $\frac{1}{5}$-inch thick. A company wants to sell 10 of these cases in plastic wrapping. What is the height of 10 cases?

$\frac{1}{5}$ in.

Multiply. Write in simplest form.

25. $4\frac{2}{3} \times \frac{4}{7}$

26. $\frac{5}{8} \times 2\frac{1}{2}$

27. $14 \times 1\frac{1}{7}$

28. $3\frac{3}{4} \times 8$

29. $-9 \times 4\frac{2}{3}$

30. $-4 \times 7\frac{5}{6}$

31. $3\frac{1}{4} \times 2\frac{2}{3}$

32. $5\frac{1}{3} \times 3\frac{3}{4}$

33. **TELEVISION** A media research survey showed that one evening, $\frac{2}{3}$ of all U.S. households had their TVs on, and $\frac{3}{8}$ of them were watching a World Series baseball game. What fraction of U.S. households was watching the game?