

Additional Practice 3-7

Multiply Multi-Digit Numbers

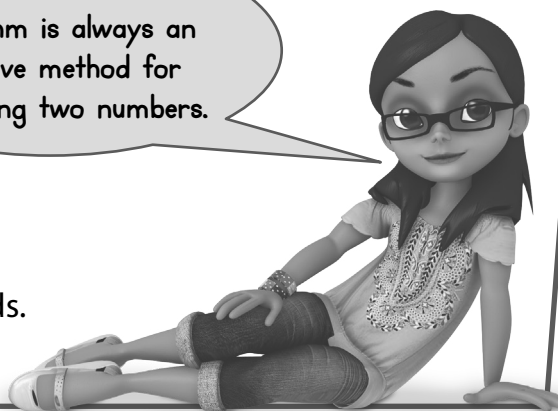
Another Look!

A sports store sells skateboards for \$112. Last month the store sold 45 skateboards. How much money did the store bring in from selling them?

$$\begin{array}{r} 112 \\ \times 45 \\ \hline 560 \\ + 4480 \\ \hline 5,040 \end{array}$$

The store brought in \$5,040 from selling skateboards.

The Standard Algorithm is always an effective method for multiplying two numbers.



For 1–12, find each product.

1.
$$\begin{array}{r} 1206 \\ \times 15 \\ \hline 6030 \\ 12060 \\ \hline 18,090 \end{array}$$

2.
$$\begin{array}{r} 240 \\ \times 22 \\ \hline 480 \\ 4800 \\ \hline 5,280 \end{array}$$

3.
$$\begin{array}{r} 654 \\ \times 45 \\ \hline 3270 \\ 26160 \\ \hline 29,430 \end{array}$$

4.
$$\begin{array}{r} 339 \\ \times 50 \\ \hline 000 \\ 16950 \\ \hline 16,950 \end{array}$$

5.
$$\begin{array}{r} 423 \\ \times 18 \\ \hline 7,614 \end{array}$$

6.
$$\begin{array}{r} 914 \\ \times 12 \\ \hline 10,968 \end{array}$$

7.
$$\begin{array}{r} 125 \\ \times 15 \\ \hline 1,875 \end{array}$$

8.
$$\begin{array}{r} 425 \\ \times 82 \\ \hline 34,850 \end{array}$$

9.
$$\begin{array}{r} 185 \\ \times 24 \\ \hline 4,440 \end{array}$$

10.
$$\begin{array}{r} 1,288 \\ \times 33 \\ \hline 42,504 \end{array}$$

11.
$$\begin{array}{r} 6,301 \\ \times 47 \\ \hline 296,147 \end{array}$$

12.
$$\begin{array}{r} 3,440 \\ \times 75 \\ \hline 258,000 \end{array}$$



13. Tomika plans to run 84 miles in 4 weeks. If she continues the pattern, how many miles will she run in 1 year? Explain.

1 year = 52 weeks



Sample answer:

$84 \div 4 = 21$, so she runs 21 miles each week. $21 \text{ mi per wk} \times 52 \text{ wk per yr} = 1,092 \text{ mi per yr}$.

14. Pete owns several pizza restaurants. He sells cheese pizzas for \$12 each. How much money was made in January at the Westland location? **\$21,888**

Cheese Pizza Sales for January	
Location	Number Sold
Downtown	1,356
Center City	998
Westland	1,824

15. How many more pizzas did the Downtown location sell than the Center City location? Write an equation to show your work.

358 more pizzas; $1,356 - 998 = 358$

16. **Make Sense and Persevere**

How many more pizzas does the Westland location need to sell to equal the total number of pizzas sold by the Downtown and Center City locations? Explain your work.

530 pizzas; $1,356 + 998 = 2,354$; $2,354 - 1,824 = 530$

17. **Higher Order Thinking** A farmer grows 128 red tomato plants and 102 yellow tomato plants. Each plant produces about 32 tomatoes. The farmer plans to sell each tomato for \$2. Explain how to find a reasonable estimate for the total amount of money the farmer will earn if she sells all of the tomatoes.

Sample answer: About \$13,800; $102 + 128$ is 230 tomato plants; 230×32 is about 6,900 tomatoes; $6,900 \times \$2 = \$13,800$

Assessment Practice

18. The product of the following expression is 15,688.

$$\begin{array}{r} 212 \\ \times \square 4 \\ \hline \end{array}$$

What is the missing digit?

- (A) 0
- (B) 1
- (C) 4
- (D) 7

19. The product of the following expression is 22,718.

$$\begin{array}{r} \square 14 \\ \times 37 \\ \hline \end{array}$$

What is the missing digit?

- (A) 1
- (B) 4
- (C) 6
- (D) 7