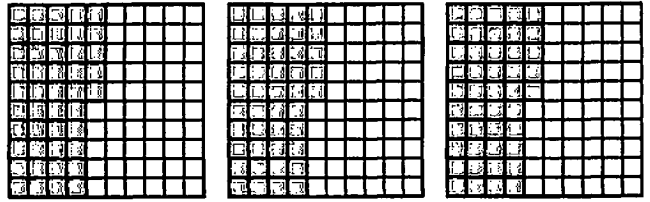


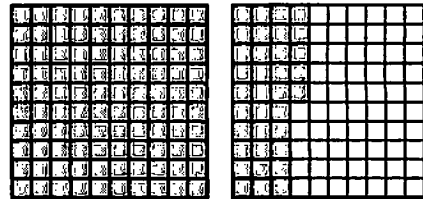


SKILL 9: Multiplying a Whole Number by a Decimal

One way to find the product of a decimal and a whole number, such as 3×0.45 , is to use repeated addition. The grids show that $0.45 + 0.45 + 0.45 = 1.35$.



To multiply a whole number by a decimal, multiply as you would whole numbers. Count the total number of digits to the right of the decimal point in both factors. Write the answer with the same number of decimal places.



Example

Multiply: 3×0.45 .

Count the digits to the right of the decimal point in each factor.

$0.45 \leftarrow$ 2 decimal places
 $\times 3 \leftarrow$ 0 decimal places
 \leftarrow 2 decimal places

Multiply.

$$\begin{array}{r} 45 \\ \times 3 \\ \hline 135 \end{array}$$

Put the decimal point in the answer.

0.45
 $\times 3$
 $\hline 1.35$

There are 2 digits after the decimal points in the factors, so the product has 2 decimal places.

$3 \times 0.45 = 1.35$

Guided Practice

Place a decimal point in each product.

1. $1.279 \leftarrow$ 3 decimal places

$\times 5 \leftarrow$ 0 decimal places

$6395 \leftarrow$ _____ decimal places

2. $23 \leftarrow$ _____ decimal places

$\times 0.4 \leftarrow$ _____ decimal place

$92 \leftarrow$ _____ decimal place

3. $8.6 \leftarrow$ _____ decimal place

$\times 40 \leftarrow$ _____ decimal places

$3440 \leftarrow$ _____ decimal place

4. $49 \leftarrow$ _____ decimal places

$\times 0.016 \leftarrow$ _____ decimal places

294

490

$784 \leftarrow$ _____ decimal places

Multiply.

5. $\$25.50 \times 7 =$ _____

6. $13 \times 0.274 =$ _____

SKILL 9: Practice

Place a decimal point in each product.

1. $12 \times 8.76 = 10512$ 2. $4.67 \times 7 = 3269$ 3. $8 \times 17.6 = 1408$

4. $2.831 \times 3 = 8493$ 5. $0.236 \times 21 = 4956$ 6. $3.375 \times 8 = 27000$

Multiply.

7.
$$\begin{array}{r} 0.4 \\ \times 6 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 0.39 \\ \times 3 \\ \hline \end{array}$$

9.
$$\begin{array}{r} 0.12 \\ \times 7 \\ \hline \end{array}$$

10.
$$\begin{array}{r} 8.3 \\ \times 6 \\ \hline \end{array}$$

11.
$$\begin{array}{r} 0.208 \\ \times 24 \\ \hline \end{array}$$

12.
$$\begin{array}{r} 1.022 \\ \times 15 \\ \hline \end{array}$$

13.
$$\begin{array}{r} 3.7 \\ \times 65 \\ \hline \end{array}$$

14.
$$\begin{array}{r} 0.52 \\ \times 26 \\ \hline \end{array}$$

15. $324 \times 0.28 =$ _____

16. $\$25.98 \times 12 =$ _____

17. $1.65 \times 10 =$ _____

18. $8.111 \times 9 =$ _____

19. $18 \times 14.1 =$ _____

20. $6 \times 3.422 =$ _____

21. $\$1.02 \times 60 =$ _____

22. $9 \times 200.4 =$ _____

Solve.

23. The Beast, a roller coaster in Cincinnati, Ohio, is 1.4 miles long. How far would you travel in 5 rides? _____

24. The Dragon King in Salou, Spain, has a track that is 0.789 mile long. How far would you travel in 3 rides? _____

25. Multiply: 53×0.27 .

Skill 9

A 4.77

C 1.431

B 14.31

D 143.1

26. Add: $4.86 + 3.7$.

Skill 6

F 7.56

H 8.5

G 8.56

J 4.33