

## 6.1 Expanded Algorithm

For **1** through **10**, use the expanded algorithm to multiply.

**1.**

$$\begin{array}{r} \times 83 \\ 4 \\ \hline \end{array}$$

partial product

$+$

$$\begin{array}{r} \times 83 \\ 4 \\ \hline \end{array}$$

partial product

$+$

$$\begin{array}{r} \times 83 \\ 4 \\ \hline \end{array}$$

product

**2.**

$$\begin{array}{r} \times 57 \\ 6 \\ \hline \end{array}$$

partial product

$+$

$$\begin{array}{r} \times 57 \\ 6 \\ \hline \end{array}$$

partial product

$+$

$$\begin{array}{r} \times 57 \\ 6 \\ \hline \end{array}$$

product

**3.**

$$\begin{array}{r} \times 19 \\ 8 \\ \hline \end{array}$$

partial product

$+$

$$\begin{array}{r} \times 19 \\ 8 \\ \hline \end{array}$$

partial product

$+$

$$\begin{array}{r} \times 19 \\ 8 \\ \hline \end{array}$$

product

**4.**

$$\begin{array}{r} \times 42 \\ 9 \\ \hline \end{array}$$

partial product

$+$

$$\begin{array}{r} \times 42 \\ 9 \\ \hline \end{array}$$

partial product

$+$

$$\begin{array}{r} \times 42 \\ 9 \\ \hline \end{array}$$

product

**5.**

$$\begin{array}{r} \times 75 \\ 6 \\ \hline \end{array}$$

partial product

$+$

$$\begin{array}{r} \times 75 \\ 6 \\ \hline \end{array}$$

partial product

$+$

$$\begin{array}{r} \times 75 \\ 6 \\ \hline \end{array}$$

product

**6.**

$$\begin{array}{r} \times 64 \\ 5 \\ \hline \end{array}$$

partial product

$+$

$$\begin{array}{r} \times 64 \\ 5 \\ \hline \end{array}$$

partial product

$+$

$$\begin{array}{r} \times 64 \\ 5 \\ \hline \end{array}$$

product

**7.**

$$\begin{array}{r} \times 17 \\ 9 \\ \hline \end{array}$$

partial product

$+$

$$\begin{array}{r} \times 17 \\ 9 \\ \hline \end{array}$$

partial product

$+$

$$\begin{array}{r} \times 17 \\ 9 \\ \hline \end{array}$$

product

**8.**

$$\begin{array}{r} \times 93 \\ 4 \\ \hline \end{array}$$

partial product

$+$

$$\begin{array}{r} \times 93 \\ 4 \\ \hline \end{array}$$

partial product

$+$

$$\begin{array}{r} \times 93 \\ 4 \\ \hline \end{array}$$

product

**9.**

$$\begin{array}{r} \times 28 \\ 7 \\ \hline \end{array}$$

partial product

$+$

$$\begin{array}{r} \times 28 \\ 7 \\ \hline \end{array}$$

partial product

$+$

$$\begin{array}{r} \times 28 \\ 7 \\ \hline \end{array}$$

product

**10.**

$$\begin{array}{r} \times 56 \\ 8 \\ \hline \end{array}$$

partial product

$+$

$$\begin{array}{r} \times 56 \\ 8 \\ \hline \end{array}$$

partial product

$+$

$$\begin{array}{r} \times 56 \\ 8 \\ \hline \end{array}$$

product

- 11.** A commuter van has 38 seats and 14 windows. How many windows are in 6 commuter vans?

**A** 70      **B** 84      **C** 102      **D** 228