

# LONG MULTIPLICATION 1

**TARGET** To use a formal written method for long multiplication.

Examples

$$\begin{array}{r} \phantom{1} \phantom{2} \phantom{3} \phantom{0} \phantom{6} \\ \phantom{1} \phantom{2} \phantom{3} \phantom{0} \phantom{6} \\ \times \phantom{1} \phantom{2} \phantom{3} \phantom{0} \phantom{6} \\ \hline 1\ 2\ 3\ 0\ 6 \\ 3\ 5\ 1\ 1\ 6\ 0 \\ \hline 4\ 7\ 4\ 6\ 6 \end{array} \quad \begin{array}{l} (1758 \times 7) \\ (1758 \times 20) \end{array}$$

$$\begin{array}{r} \phantom{1} \phantom{3} \phantom{1} \phantom{2} \phantom{6} \\ \phantom{1} \phantom{3} \phantom{1} \phantom{2} \phantom{6} \\ \times \phantom{1} \phantom{3} \phantom{1} \phantom{2} \phantom{6} \\ \hline 2\ 6\ 3\ 5\ 2 \\ 1\ 3\ 1\ 2\ 7\ 6\ 0 \\ \hline 1\ 5\ 8\ 1\ 1\ 2 \\ \phantom{1} \phantom{5} \phantom{8} \phantom{1} \phantom{1} \phantom{2} \\ \phantom{1} \phantom{5} \phantom{8} \phantom{1} \phantom{1} \phantom{2} \end{array}$$

## A

Copy and complete.

$$\begin{array}{r} 1 \quad 68 \\ \times \quad 13 \\ \hline \phantom{00} \phantom{00} \phantom{00} \phantom{00} \\ \phantom{00} \phantom{00} \phantom{00} \phantom{00} \\ \hline \phantom{00} \phantom{00} \phantom{00} \phantom{00} \end{array} \quad \begin{array}{l} (68 \times 3) \\ (68 \times 10) \end{array}$$

$$\begin{array}{r} 2 \quad 492 \\ \times \quad 18 \\ \hline \phantom{00} \phantom{00} \phantom{00} \phantom{00} \\ \phantom{00} \phantom{00} \phantom{00} \phantom{00} \\ \hline \phantom{00} \phantom{00} \phantom{00} \phantom{00} \end{array} \quad \begin{array}{l} (492 \times 8) \\ (492 \times 10) \end{array}$$

$$\begin{array}{r} 3 \quad 36 \\ \times \quad 24 \\ \hline \phantom{00} \phantom{00} \phantom{00} \phantom{00} \\ \phantom{00} \phantom{00} \phantom{00} \phantom{00} \\ \hline \phantom{00} \phantom{00} \phantom{00} \phantom{00} \end{array} \quad \begin{array}{l} (36 \times 4) \\ (36 \times 20) \end{array}$$

$$\begin{array}{r} 4 \quad 267 \\ \times \quad 35 \\ \hline \phantom{00} \phantom{00} \phantom{00} \phantom{00} \\ \phantom{00} \phantom{00} \phantom{00} \phantom{00} \\ \hline \phantom{00} \phantom{00} \phantom{00} \phantom{00} \end{array} \quad \begin{array}{l} (267 \times 5) \\ (267 \times 30) \end{array}$$

Work out

- |                  |                    |
|------------------|--------------------|
| 5 $63 \times 42$ | 9 $174 \times 34$  |
| 6 $57 \times 26$ | 10 $219 \times 28$ |
| 7 $49 \times 19$ | 11 $438 \times 17$ |
| 8 $85 \times 23$ | 12 $365 \times 45$ |

## B

Copy and complete.

$$\begin{array}{r} 1 \quad 1247 \\ \times \quad 26 \\ \hline \phantom{00} \phantom{00} \phantom{00} \phantom{00} \\ \phantom{00} \phantom{00} \phantom{00} \phantom{00} \\ \hline \phantom{00} \phantom{00} \phantom{00} \phantom{00} \end{array} \quad \begin{array}{l} (1247 \times 6) \\ (1247 \times 20) \end{array}$$

$$\begin{array}{r} 2 \quad 2538 \\ \times \quad 14 \\ \hline \phantom{00} \phantom{00} \phantom{00} \phantom{00} \\ \phantom{00} \phantom{00} \phantom{00} \phantom{00} \\ \hline \phantom{00} \phantom{00} \phantom{00} \phantom{00} \end{array} \quad \begin{array}{l} (2538 \times 4) \\ (2538 \times 10) \end{array}$$

$$\begin{array}{r} 3 \quad 1673 \\ \times \quad 38 \\ \hline \phantom{00} \phantom{00} \phantom{00} \phantom{00} \\ \phantom{00} \phantom{00} \phantom{00} \phantom{00} \\ \hline \phantom{00} \phantom{00} \phantom{00} \phantom{00} \end{array} \quad \begin{array}{l} (1673 \times 8) \\ (1673 \times 30) \end{array}$$

$$\begin{array}{r} 4 \quad 3496 \\ \times \quad 25 \\ \hline \phantom{00} \phantom{00} \phantom{00} \phantom{00} \\ \phantom{00} \phantom{00} \phantom{00} \phantom{00} \\ \hline \phantom{00} \phantom{00} \phantom{00} \phantom{00} \end{array} \quad \begin{array}{l} (3496 \times 5) \\ (3496 \times 20) \end{array}$$

Work out

- |                    |                     |
|--------------------|---------------------|
| 5 $5728 \times 16$ | 9 $6257 \times 43$  |
| 6 $4359 \times 37$ | 10 $1985 \times 24$ |
| 7 $2584 \times 29$ | 11 $4874 \times 39$ |
| 8 $3046 \times 35$ | 12 $7169 \times 48$ |

## C

Work out

- 1  $24\ 135 \times 28$
- 2  $57\ 248 \times 19$
- 3  $42\ 186 \times 34$
- 4  $16\ 259 \times 45$
- 5  $35\ 367 \times 26$
- 6  $49\ 526 \times 37$
- 7  $21\ 687 \times 85$
- 8  $52\ 958 \times 64$
- 9  $249 \times 183$
- 10  $376 \times 256$
- 11  $458 \times 149$
- 12  $864 \times 572$
- 13  $327 \times 265$
- 14  $483 \times 174$
- 15  $739 \times 328$
- 16  $562 \times 437$
- 17 One can weighs 387 g. There are 36 cans in a box. What is the total weight of 25 boxes in kilograms?