

NAME \_\_\_\_\_

DATE \_\_\_\_\_



## Alex & the Algorithm

- 1** Alex is practicing solving problems using the standard algorithm for multiplication. He knows the first step, but then he gets stuck. Finish these problems Alex started.

$$\begin{array}{r} 5 \\ 28 \\ \times 67 \\ \hline 6 \end{array}$$

$$\begin{array}{r} 2 \\ 93 \\ \times 87 \\ \hline 1 \end{array}$$

$$\begin{array}{r} 4 \\ 56 \\ \times 48 \\ \hline 448 \end{array}$$

- 2** When using the algorithm, Alex doesn't understand why he needs to write a zero in the ones place of the second partial product.
- a** Explain to Alex why he needs to do this.
- b** What would happen if Alex did not place a zero there?

$$\begin{array}{r} 1 \\ 37 \\ \times 26 \\ \hline 222 \\ + 740 \leftarrow \\ \hline 962 \end{array}$$

- 3** Fill in the boxes to complete the problems.

$$\begin{array}{r} 123 \\ \times 56 \\ \hline 7\boxed{\phantom{0}}8 \\ + \boxed{\phantom{0}},1\boxed{\phantom{0}}0 \\ \hline \boxed{\phantom{0000}} \end{array}$$

$$\begin{array}{r} 789 \\ \times 12 \\ \hline 1,5\boxed{\phantom{0}}8 \\ + 7,\boxed{\phantom{0}}9\boxed{\phantom{0}} \\ \hline \boxed{\phantom{0}},468 \end{array}$$