

Multiply by Whole Tens in Columns

$7 \times 58 = 406$. **NOW THINK:**

What would 70×58 be?

Can you guess?

$$\begin{array}{r} 58 \\ \times 7 \\ \hline 406 \end{array}$$

$116 \times 9 = 1,044$. **NOW**

THINK:

What would 116×90 be?

Can you guess?

$$\begin{array}{r} 116 \\ \times 9 \\ \hline 1044 \end{array}$$

Don't read more until you think about the questions above!

70×58

$= 10 \times (7 \times 58)$

So, the result to 70×58 is ten times the result to 7×58 .

Since $7 \times 58 = 406$, then 70×58 is 4,060.
Just tag a zero!

116×90

$= (116 \times 9) \times 10$

So, the result to 116×90 is *ten* times the result to 116×9 .

Since $116 \times 9 = 1,044$, then 116×90 is 10,440.
Just tag a zero!

1. Use the above method to multiply these.

a. $60 \times 87 =$ _____

(First multiply 6×87)

b. $51 \times 40 =$ _____

(First multiply $51 \times$ _____)

c. $66 \times 30 =$ _____

(First multiply _____ \times _____)

2. a. A crate of apples weighs 20 kg.
How much do 65 crates weigh?

b. One crate contains four layers of apples.
There are 25 apples in each layer.
How many apples are in a crate?

c. A store owner sold 60 kg of apples to one customer.
How many apples did the customer get?

$ \begin{array}{r} 5 \\ 58 \\ \times 70 \\ \hline 4060 \end{array} $	<p>See the zero in 70? You can write a zero in the ones place in the answer before calculating. Then just multiply 7×58 normally.</p>
$ \begin{array}{r} 57 \\ 558 \\ \times 90 \\ \hline 50220 \end{array} $	<p>See the zero in 90? You can write a zero in the ones place in the answer before calculating. Then just multiply 9×558 normally.</p>

3. Multiply. Place a zero in the ones place before multiplying.

a.
$$\begin{array}{r}
 46 \\
 \times 80 \\
 \hline
 0
 \end{array}$$

b.
$$\begin{array}{r}
 27 \\
 \times 60 \\
 \hline
 \end{array}$$

c.
$$\begin{array}{r}
 805 \\
 \times 30 \\
 \hline
 \end{array}$$

d.
$$\begin{array}{r}
 179 \\
 \times 40 \\
 \hline
 \end{array}$$

e.
$$\begin{array}{r}
 549 \\
 \times 20 \\
 \hline
 \end{array}$$

4. Multiply. Place a zero in the ones place and in the tens place before multiplying.

a.
$$\begin{array}{r}
 40 \\
 \times 80 \\
 \hline
 0
 \end{array}$$

b.
$$\begin{array}{r}
 120 \\
 \times 70 \\
 \hline
 \end{array}$$

c.
$$\begin{array}{r}
 231 \\
 \times 80 \\
 \hline
 \end{array}$$

d.
$$\begin{array}{r}
 658 \\
 \times 70 \\
 \hline
 \end{array}$$

5. The bus driver Mr. Hendrickson drives about 250 km each day on his route. About how many kilometers does he drive in his 5-day work week?

How about in the 4 weeks he works in a month?

6. One side of farmer Greg's *square*-shaped field measures 200 m. He jogged around it seven times. What is the distance he jogged?

7. Calculate. Use a notebook.

a. $80 \times 56 + 15,000$

b. $65,000 - 50 \times 430$

c. $20 \times (85 + 126) + 2,333$

Puzzle Corner

If $382 \times 29 = 11,078$,
then what is $3,820 \times 290$?