Multiply by Whole Tens in Columns

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

What would 70×58 be?

Can you guess?

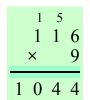
$$\begin{array}{c}
5 \\
5 \\
\times \\
7
\end{array}$$

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

THINK:

What would $\underline{116 \times 90}$ be?

Can you guess?



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

$$70 \times 58$$

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

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!

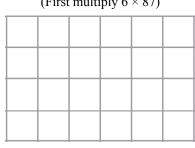
116 × 90

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

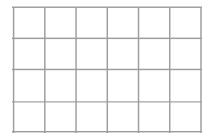
So, the result to 116×90 is ten times the result to 116×9 .

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

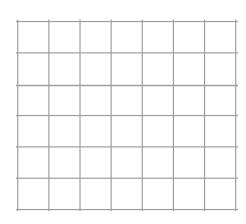
1. Use the above method to multiply these.







- 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?



	×	5 5 7	
4	0	6	0

See the zero in 70? You can write <u>a zero</u> in the ones place in the answer before calculating. Then just multiply 7×58 normally.

			_	7 5 9	
	5	0	2	2	0

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.

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

a.
$$\begin{array}{c} 4 & 6 \\ \times & 8 & 0 \\ \hline & 0 \end{array}$$

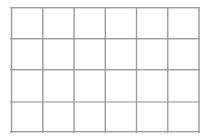
b.
$$\begin{array}{ccc} 2 & 7 \\ \times & 6 & 0 \end{array}$$

4. Multiply. Place a zero in the ones place <u>and</u> in the tens place before multiplying.

a.
$$\begin{array}{c} 4 & 0 \\ \times & 8 & 0 \\ \hline & 0 \end{array}$$

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

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



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