

Multiplying by Whole Tens and Hundreds

We have studied the SHORTCUTS for multiplying any number by 10, 100, or 1,000:

To multiply any number by **10**, just tag **ONE** zero on the end.

To multiply any number by **100**, just tag **TWO** zeros on the end.

To multiply any number by **1,000**, just tag **THREE** zeros on the end.

$10 \times 481 = 4,810$

$100 \times 47 = 4,700$

$1000 \times 578 = 578,000$

Note especially what happens when the number you multiply already ends in a zero or zeros. The rule works the same; you still have to tag the zero or zeros.

$10 \times 800 = 8000$

$100 \times 6,600 = 660,000$

$1000 \times 40 = 40,000$

1. Multiply.

a. $10 \times 315 =$ _____	b. $100 \times 6,200 =$ _____	c. $1,000 \times 250 =$ _____
$3,560 \times 10 =$ _____	$10 \times 1,200 =$ _____	$38 \times 1,000 =$ _____
$35 \times 100 =$ _____	$100 \times 130 =$ _____	$10 \times 5,000 =$ _____

SHORTCUT for multiplying by 20 or 200 (You can probably guess this one!)

What is 20×14 ?

Imagine the problem without the zero. Then it becomes $2 \times 14 = 28$. Then, just tag a zero to the 28 you got, so it becomes 280. So, $20 \times 14 = 280$.

What is 200×31 ?

Imagine the problem without the zeros. Then it becomes $2 \times 31 = 62$. Then, just tag *two* zeros to the result you got, so you get 6,200. In other words, $200 \times 31 = 6,200$.

2. Now try it! Multiply by 20 and 200.

a.	b.	c.	d.
$20 \times 8 =$ _____	$200 \times 7 =$ _____	$20 \times 12 =$ _____	$20 \times 16 =$ _____
$4 \times 20 =$ _____	$5 \times 200 =$ _____	$35 \times 20 =$ _____	$42 \times 200 =$ _____
$20 \times 5 =$ _____	$11 \times 200 =$ _____	$200 \times 9 =$ _____	$54 \times 20 =$ _____