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** to the end. To multiply any number by **100**, just tag **TWO zeros** to the end. To multiply any number by **1,000**, just tag **THREE zeros** to the end.		
1**0** × 481 = 4,81**0**	1**00** × 47 = 4,7**00**	1**000** × 578 = 578**,000**
Note especially what happens when the number you multiply already ends in a zero or zeros. The rule works the same way, and you *still* have to tag the zero or zeros.		
1**0** × 800 = 800**0**	1**00** × 6,600 = 660,0**00**	1**000** × 40 = 40**,000**

1. Multiply.

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

Shortcut for multiplying by 20 or 200 (You can probably guess this one!)	
What is 20 × 14? First solve the problem without the zero in 20: 2 × 14 = 28. Next, tag a zero to the answer, 28, and you get 280. So, 20 × 14 = 280.	**What is 200 × 31?** First solve the problem without the zeros: 2 × 31 = 62. Next, just *two* zeros to the result, 62, to get 6,200. In other words, 200 × 31 = 6,200.

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

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