

Let's focus on what happens with place value when we multiply by 10.

When we multiply by 10, the digits move one place to the left. Look at the place value charts below:

H	T	O
		9

 $\times 10 =$

H	T	O
	9	0

In this example, we multiplied 9×10 . The 9 moves from the ones place to the tens place and a 0 is added to the ones place.

Try it!

$4 \times 10 =$	$6 \times 10 =$	$3 \times 10 =$																		
<table border="1" style="width: 100%; text-align: center; border-collapse: collapse;"> <thead> <tr><th>H</th><th>T</th><th>O</th></tr> </thead> <tbody> <tr><td style="width: 40px; height: 40px;"></td><td style="width: 40px; height: 40px; color: orange;">4</td><td style="width: 40px; height: 40px; color: orange;">0</td></tr> </tbody> </table>	H	T	O		4	0	<table border="1" style="width: 100%; text-align: center; border-collapse: collapse;"> <thead> <tr><th>H</th><th>T</th><th>O</th></tr> </thead> <tbody> <tr><td style="width: 40px; height: 40px;"></td><td style="width: 40px; height: 40px; color: orange;">6</td><td style="width: 40px; height: 40px; color: orange;">0</td></tr> </tbody> </table>	H	T	O		6	0	<table border="1" style="width: 100%; text-align: center; border-collapse: collapse;"> <thead> <tr><th>H</th><th>T</th><th>O</th></tr> </thead> <tbody> <tr><td style="width: 40px; height: 40px;"></td><td style="width: 40px; height: 40px; color: orange;">3</td><td style="width: 40px; height: 40px; color: orange;">0</td></tr> </tbody> </table>	H	T	O		3	0
H	T	O																		
	4	0																		
H	T	O																		
	6	0																		
H	T	O																		
	3	0																		
$7 \times 10 =$	$2 \times 10 =$	$9 \times 10 =$																		
<table border="1" style="width: 100%; text-align: center; border-collapse: collapse;"> <thead> <tr><th>H</th><th>T</th><th>O</th></tr> </thead> <tbody> <tr><td style="width: 40px; height: 40px;"></td><td style="width: 40px; height: 40px; color: orange;">7</td><td style="width: 40px; height: 40px; color: orange;">0</td></tr> </tbody> </table>	H	T	O		7	0	<table border="1" style="width: 100%; text-align: center; border-collapse: collapse;"> <thead> <tr><th>H</th><th>T</th><th>O</th></tr> </thead> <tbody> <tr><td style="width: 40px; height: 40px;"></td><td style="width: 40px; height: 40px; color: orange;">2</td><td style="width: 40px; height: 40px; color: orange;">0</td></tr> </tbody> </table>	H	T	O		2	0	<table border="1" style="width: 100%; text-align: center; border-collapse: collapse;"> <thead> <tr><th>H</th><th>T</th><th>O</th></tr> </thead> <tbody> <tr><td style="width: 40px; height: 40px;"></td><td style="width: 40px; height: 40px; color: orange;">9</td><td style="width: 40px; height: 40px; color: orange;">0</td></tr> </tbody> </table>	H	T	O		9	0
H	T	O																		
	7	0																		
H	T	O																		
	2	0																		
H	T	O																		
	9	0																		
$1 \times 10 =$	$5 \times 10 =$	$8 \times 10 =$																		
<table border="1" style="width: 100%; text-align: center; border-collapse: collapse;"> <thead> <tr><th>H</th><th>T</th><th>O</th></tr> </thead> <tbody> <tr><td style="width: 40px; height: 40px;"></td><td style="width: 40px; height: 40px; color: orange;">1</td><td style="width: 40px; height: 40px; color: orange;">0</td></tr> </tbody> </table>	H	T	O		1	0	<table border="1" style="width: 100%; text-align: center; border-collapse: collapse;"> <thead> <tr><th>H</th><th>T</th><th>O</th></tr> </thead> <tbody> <tr><td style="width: 40px; height: 40px;"></td><td style="width: 40px; height: 40px; color: orange;">5</td><td style="width: 40px; height: 40px; color: orange;">0</td></tr> </tbody> </table>	H	T	O		5	0	<table border="1" style="width: 100%; text-align: center; border-collapse: collapse;"> <thead> <tr><th>H</th><th>T</th><th>O</th></tr> </thead> <tbody> <tr><td style="width: 40px; height: 40px;"></td><td style="width: 40px; height: 40px; color: orange;">8</td><td style="width: 40px; height: 40px; color: orange;">0</td></tr> </tbody> </table>	H	T	O		8	0
H	T	O																		
	1	0																		
H	T	O																		
	5	0																		
H	T	O																		
	8	0																		
$10 \times 10 =$																				
<table border="1" style="width: 100%; text-align: center; border-collapse: collapse;"> <thead> <tr><th>H</th><th>T</th><th>O</th></tr> </thead> <tbody> <tr><td style="width: 40px; height: 40px; color: orange;">1</td><td style="width: 40px; height: 40px; color: orange;">0</td><td style="width: 40px; height: 40px; color: orange;">0</td></tr> </tbody> </table>	H	T	O	1	0	0														
H	T	O																		
1	0	0																		

Now that you know how to multiply by 10, could you solve problems like these?

$10 \times 12 = \underline{120}$

$10 \times 75 = \underline{750}$

$10 \times 15 = \underline{150}$

$10 \times 90 = \underline{900}$

$10 \times 14 = \underline{140}$

$10 \times 87 = \underline{870}$