MULTIPLYING NUMBERS BY 10, 100, 1000 - 2

Rule 1: To multiply a number by **10**, **100**, or **1000**, move the decimal point in that number to the ***right*** as many places as there are zeros in the multiplier, attaching zeros ***if needed*** to make the required places.

When we multiply a number by a power of ten, we move the decimal point to the _____ (right/left) as many places as there are _____ in the power of ten.

Apply this rule to the following problems without actually doing the multiplication:

1) 0.814×10 = _____
2) 7.123×100 = _____
3) 15×1000 = _____
4) 7.871×100 = _____
5) 0.56×1000 = _____
6) $1.4 \times 10{,}000$ = _____
7) 0.613×100 = _____
8) 8.7123×10 = _____
9) 0.06×100 = _____
10) 7.02×1000 = _____
11) 1.39×100 = _____
12) 16×100 = _____
13) 0.8×100 = _____
14) 1.9×100 = _____
15) 61×10 = _____
16) 0.871×100 = _____
17) 6.12×1000 = _____
18) $9.1 \times 10{,}000$ = _____
19) 0.04×1000 = _____
20) 612×100 = _____
21) 9.9×1000 = _____
22) 0.88×10 = _____
23) 6×1000 = _____
24) 2.1×10 = _____

25) When we move a decimal point three places to the right, we _____ (multiply/divide) a number by _____.

26) Instead of using long multiplication, you can multiply a number by 1000 by moving the decimal point _____ (how many) places to the _____ (right/left).

27) When we move the decimal point one place to the right, we _____ (multiply/divide) a number by _____.

28) Instead of using long multiplication, you can multiply a number by 100,000 by moving the decimal point _____ (how many) places to the _____ (right/left).

RULE: RIGHT/ZEROS

1) 8.14	5) 560	9) 6	13) 80	17) 6,120	21) 9,900	25) MULTIPLY/1000
2) 712.3	6) 14,000	10) 7,020	14) 190	18) 91,000	22) 8.8	26) THREE/RIGHT
3) 15,000	7) 61.3	11) 139	15) 610	19) 40	23) 6,000	27) MULTIPLY/10
4) 787.1	8) 87.123	12) 1,600	16) 87.1	20) 61,200	24) 21	28) FIVE/RIGHT