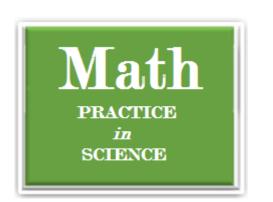
057 Math Practice

Zeros in the Dividend



Sometimes, you have to add zeros to the dividend in order to provide enough places to move the decimal point.

Example:

Divide 3.6 by .12.

Step 1:

.12)3.6

Move decimal point in divisor 2 places.

Step 2:

12)360.

Move decimal point in dividend 2 places; fill in with a zero.

Step 3:

30. 12)360. 36

<u>36</u> 00

Divide and place decimal point in quotient.

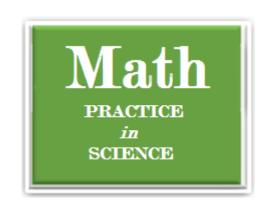
Divide. Each quotient will end on or before the thousandths place.

2.
$$.02)8$$

3.
$$.04\overline{)8.4}$$

058 Math Practice

Powers of Ten



Multiplying or dividing by 10 is simple. You can do it just by moving the decimal point. Even if you are working with powers of 10 (hundreds, thousands, ten thousands, etc.), the same rule can still be used.

When you find a zero in the multiplier, you can move the decimal point in the multiplicand to find the answer. Move the decimal point to the right. When you find a zero in the divisor, you can move the decimal point in the divisor to find the answer. Move the decimal point to the left.

Examples:				
24.8	X	10	=	248.0
2.48	\mathbf{X}	100	=	248.00
.248	X	1000	=	248.000
multiplicand		multiplier		
348000.	÷	100	=	3480
34800.	÷	10		3480
dividend		divisor		

Rules:

Count the zeros in the multiplier. Move the decimal point in the multiplicand one place to the right for each zero to find the answer.

Rules:

Count the zeros in the divisor. Move the decimal point in the dividend one place to the left for each zero to find the answer.

Multiply by these powers of 10.

Divide by these powers of 10.