EXAMPLE #1

$6.42 \times 10 = 6.4.2 = 64.2$

10 HAS ONE ZERO, WHICH TELLS YOU TO MOVE THE DECIMAL ONE PLACE TO THE **RIGHT**.

MULTIPLY.

DON'T NEED THE DECIMAL AT THE END.

$0.567 \times 1,000 = 567$ $0.567 \times 100 = 56.7$ $0.567 \times 10 = 5.67$

3 ZEROS, S0 MOVE THE DECIMAL 3 PLACES.

$2.893 \times 1,000 = 2893$ $63.02 \times 100 = 6302$ $0.983 \times 10 = 9.83$

$9.99 \times 10 = 99.9$ $3.424 \times 1,000 = 3424$ $0.042 \times 10 = 0.42$

$73.75 \times 100 = 7375$ $3.06 \times 10 = 30.6$ $1.2879 \times 1,000 = 1287.9$

$6.7 \times 1,000 = 6700$ $0.4 \times 100 = 40$ $2.57 \times 100 = 257$

NOT ENOUGH DIGITS, HAVE TO ADD ZEROS.

$45.02 \times 10 = 450.2$ $5.38 \times 1,000 = 5380$ $6.72 \times 10 = 67.2$

$2 \times 100 = 200$ $45 \times 1,000 = 45000$ $0.006 \times 1,000 = 6$

IF IT'S NOT IN SIGHT, IT'S ON THE RIGHT.

$5.3 \times 1,000 = 5300$ $20 \times 100 = 2000$ $7.93 \times 10 = 79.3$

$0.004 \times 100 = 0.4$ $627 \times 10 = 6270$ $8042 \times 100 = 804200$

NOW TRY THESE.

$3.123456 \times 100,000 = 312345.6$ $6.0034 \times 1,000,000 = 6003400$

$0.587028 \times 10,000 = 5870.28$ $5.87028 \times 100,000 = 587028$

$14.803 \times 100,000 = 1480300$ $938 \times 1,000,000 = 938000000$

EXAMPLE #2

$0.58 \times 100 = 0.58. = 58$

100 HAS TWO ZEROS, WHICH TELLS YOU TO MOVE THE DECIMAL TWO PLACES TO THE **RIGHT**.

DON'T NEED THE **0**, OR THE DECIMAL AT THE END.

DO YOU SEE THE NUMBERS GETTING BIGGER WHEN YOU MOVE THE DECIMAL TO THE RIGHT?

DIVISION IS THE SAME AS MULTIPLICATION, BUT YOU MOVE THE DECIMAL IN THE OPPOSITE DIRECTION.

EXAMPLE #1

$64.8 \div 10 = 6.4.8 = 6.48$

10 HAS ONE ZERO, WHICH TELLS YOU TO MOVE THE DECIMAL ONE PLACE TO THE **LEFT**.

DIVIDE.

$403.6 \div 1,000 = .4036$ $33.4 \div 10 = 3.34$ $105.7 \div 100 = 1.057$

3 ZEROS, S0 MOVE THE DECIMAL 3 PLACES.

$99.9 \div 100 = 0.999$ $410.5 \div 1,000 = .4105$ $0.8 \div 10 = 0.08$

$27.1 \div 10 = 2.71$ $3.9 \div 10 = 0.39$ $562.63 \div 1,000 = .56263$

$8.04 \div 10 = 0.804$ $720.7 \div 100 = 7.207$ $1234.5 \div 1,000 = 1.2345$

$4.8 \div 100 = .048$ $3658.2 \div 1,000 = 3.6582$ $0.5 \div 100 = 0.005$

NOT ENOUGH DIGITS, HAVE TO ADD A ZERO.

$7.02 \div 10 = 0.702$ $6.24 \div 100 = 0.0624$ $2.1 \div 1,000 = 0.0021$

$63 \div 100 = .63$ $0.86 \div 10 = 0.086$ $492 \div 1,000 = 0.492$

IF IT'S NOT IN SIGHT, IT'S ON THE RIGHT.

$5.5 \div 100 = 0.055$ $20 \div 1,000 = 0.02$ $473 \div 10 = 47.3$

$613 \div 100 = 6.13$ $0.9 \div 100 = 0.009$ $7 \div 1,000 = 0.007$

NOW TRY THESE.

$7003.43 \div 10,000 = 0.700343$ $37164 \div 1,000,000 = 0.037164$

$600 \div 100,000 = 0.006$ $6794 \div 10,000,000 = 0.0006794$

$5.8 \div 100,000 = 0.000058$ $14064.99 \div 100,000 = 0.1406499$

EXAMPLE #2

$58.2 \div 100 = .58.2 = .582$

100 HAS TWO ZEROS, WHICH TELLS YOU TO MOVE THE DECIMAL TWO PLACES TO THE **LEFT**.

DO YOU SEE THE NUMBERS GETTING SMALLER WHEN YOU MOVE THE DECIMAL TO THE LEFT?