

## MULTIPLYING DECIMALS BY 10's

ANSWERS - PAGE 1

### EXAMPLE #1

$$6.42 \times 10 = 64.2 = 64.2$$

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

DON'T NEED THE DECIMAL AT THE END.

**MULTIPLY.**

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

3 ZEROS, SO MOVE THE DECIMAL 3 PLACES.

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

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

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

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

NOT ENOUGH DIGITS, HAVE TO ADD ZEROS.

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

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

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

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

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

**NOW TRY THESE.**

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

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

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

### EXAMPLE #2

$$0.58 \times 100 = 58 = 58$$

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?

## DIVIDING DECIMALS BY 10's

ANSWERS - PAGE 2

### EXAMPLE #1

$$64.8 \div 10 = 6.48 = 6.48$$

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

**DIVIDE.**

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

3 ZEROS, SO MOVE THE DECIMAL 3 PLACES.

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

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

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

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

NOT ENOUGH DIGITS, HAVE TO ADD A ZERO.

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

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

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

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

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

**NOW TRY THESE.**

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

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

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