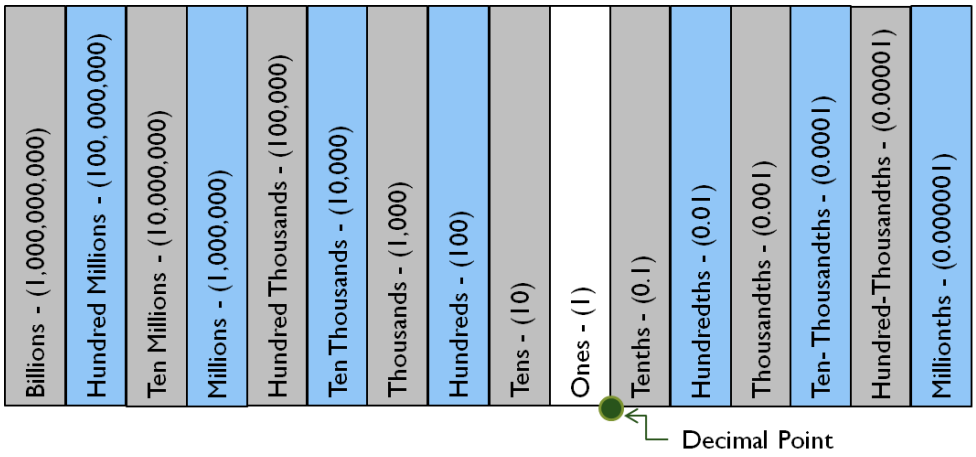
Decimal Numbers



10 - 1 place
100 - 2 places
1,000 - 3 places
10,000 - 4 places

Write in words

10.003

14.36

0.0006

Write as decimal numbers

Twenty seven and two tenths

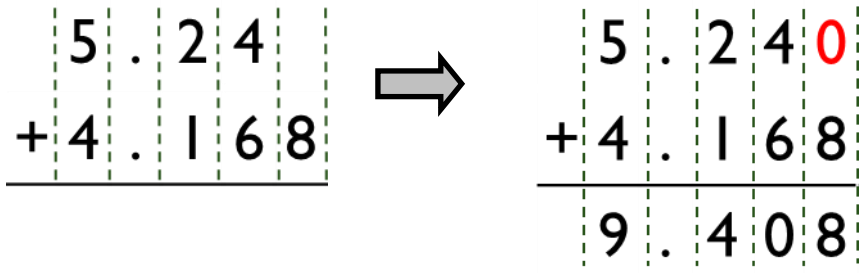
Five hundred and forty-four ten thousandths

Ten and one hundredth

Addition of Decimal Numbers

1. Line up the decimal points vertically.
2. Attach zeros to provide the same number of decimal digits (as needed).
3. Add the numbers.
4. Place answer decimal point in the same vertical line.

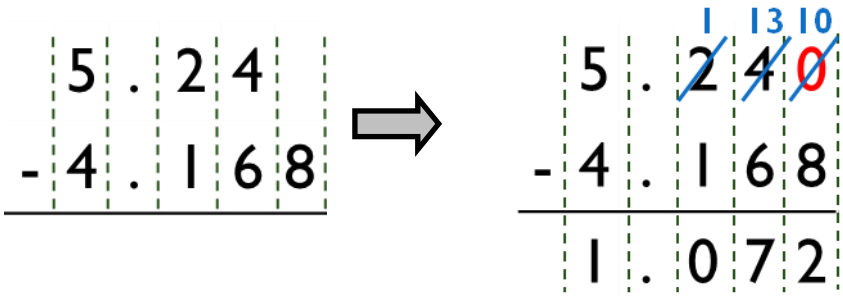
Ex. 1 - Add the following 5.24 + 4.168



Subtraction of Decimal Numbers

1. Line up the decimal points vertically.
2. Attach zeros to provide the same number of decimal digits.
3. Subtract the numbers (borrow if necessary).
4. Place answer decimal point in the same vertical line.

Ex. 1 - Subtract the following 5.24 - 4.168



Multiplication of Decimal Numbers

1. Multiply the two decimal numbers as if they were whole numbers. Pay no attention to the decimal points.
2. The sum of the decimal digits in the two numbers being multiplied will give you the number of decimal digits in the answer.

Ex. 1 - Multiply the following 5.24 x 4.168

```
        5 2 4
    x 4 1 6 8
  -----------
      4 1 9 2
    3 1 4 4 0
    5 2 4 0 0
  2 0 9 6 0 0 0
  -----------
  2 1 8 4 0 3 2
```

⇨

```
        5 2 4
    x 4 1 6 8
  -----------
  2 1 . 8 4 0 3 2
```

Division of Decimal Numbers

1. Write the divisor and dividend in standard long-division form.
2. Shift the decimal point in the divisor to the right so as to make the divisor a whole number.
3. Shift the decimal point in the dividend the same amount (attach zeros if necessary).
4. Place the decimal point in the answer space directly above the new decimal position in the dividend.
5. Now divide exactly as you would with whole numbers. The decimal point in divisor and dividend may now be ignored.

Ex. 1 - Divide the following . Round to the nearest tenth. $15.270 \div 3.2$

```
        4.77
3.2 | 15.270
      128
       247
       224
         230
         224
           6
```

Answer is 4.8

1. **For the following machine parts, find W, the number of pounds per part: C, the cost of the metal per part; and T, the total cost.**

Metal Parts	Number of Inches Need-ed	Number of Pounds per Inch	Cost per Pound	Pounds (W)	Cost per Part (C)
A	50.2	0.38	$0.95		
B	115.6	0.19	$0.72		
C	98.1	0.08	$1.03		
D	10.3	0.32	$2.42		
				T =	

The GCMCA program at Cincinnati State is an equal opportunity program, auxiliary aids and services are available upon request to individuals with disabilities. This workforce solution was funded by a grant awarded under the Trade Adjustment Community College and Career Training Grants as implemented by the U.S. Dept. of Labor's Employment and Training Administration.