



There are also different rules for reporting the answer when you add or subtract:

- 1) The answer should have the same number of decimal places as that of the number with the least decimal.

Example: 
$$\begin{array}{r} 4.838 \text{ g} \\ +1.0023 \text{ g} \\ \hline 5.8403 \text{ g} = 5.84 \text{ g} \end{array}$$

↑  
is 0-4, so round down.

$$\begin{array}{r} 486.58 \text{ g} \\ - 421. \text{ g} \\ \hline 65.58 \text{ g} = 66 \text{ g} \end{array}$$

↑  
is 5-9, so round up.

NOTE: IN ADDITION AND SUBTRACTION, DECIMAL POINTS MUST BE LINED UP!!

Solve the following:

a) 
$$\begin{array}{r} 0.00000313 \\ +17 \\ \hline \end{array}$$

b) 
$$\begin{array}{r} 4.9670 \\ - 3.1 \\ \hline \end{array}$$

c) 
$$\begin{array}{r} 0.000343 \\ +0.17 \\ \hline \end{array}$$

d) 
$$\begin{array}{r} 78 \\ - .99 \\ \hline \end{array}$$

e)  $336,000 - 33,000.03 =$

f)  $0.99 - .1 =$

Additional practice problems:

How many sig. figs in the following number?

a) 87\_\_\_\_\_

b) 190.\_\_\_\_\_

c) 0.000190\_\_\_\_\_

d) 606.0\_\_\_\_\_

e) 1.008\_\_\_\_\_

Round off the following to 2 S.F.

a) 86730\_\_\_\_\_

b) 120.99\_\_\_\_\_

c) .0003450\_\_\_\_\_

d) 0.0555\_\_\_\_\_

e) 9898989\_\_\_\_\_

How many S.F. should be in the following answers: (Don't work out the problems!)

a)  $0.2 \times 43.98 =$  \_\_\_\_\_

b)  $43,000,000 \times 0.00546 =$  \_\_\_\_\_

c)  $43.0 - 17.2 =$  \_\_\_\_\_

d)  $0.00235 - 3.0 =$  \_\_\_\_\_

e)  $143.000 - 3.45 =$  \_\_\_\_\_

f)  $3.40 \times 0.04 =$  \_\_\_\_\_

g)  $\frac{0.300 \times .802}{30.44} =$  \_\_\_\_\_

h)  $\frac{39.04 \times 1.009}{3} =$  \_\_\_\_\_

i)  $\frac{0.00390 \times 2.0098}{2.02} =$  \_\_\_\_\_

Solve the following problems:

a) 
$$\begin{array}{r} 0.004598 \\ +4 \\ \hline \end{array}$$

b) 
$$\frac{43.2 \times 30.3 \times 17.0}{43.30 \times 0.0045 \times 99} =$$

c) 
$$\frac{338855.0}{+10000000.003}$$

d) 
$$\begin{array}{r} 73 \\ -14.98 \\ \hline \end{array}$$

e) 
$$\begin{array}{r} 8.0 \\ -1.99 \\ \hline \end{array}$$

f)  $17.0 + 1.4 - 8.9 =$

How many S.F. are in the following numbers?

a)  $3.0 \times 10^9$  \_\_\_\_\_

b) 0.0090\_\_\_\_\_

c)  $4.20 \times 10^{-4}$  \_\_\_\_\_

d) 900,000\_\_\_\_\_

e) 900,000.\_\_\_\_\_

f)  $9.4450 \times 10^7$  \_\_\_\_\_