

Sig Figs

5000 1 sig fig

5000. 4 sig figs

Pacific
Decimal point
Present
Atlantic
Decimal
Absent

50.79 (4)

0.007 (1)

0.00700 (3)

Sep 8-7:43 AM

Mult, Divide with Sig Figs

- ① Mult as normal
- ② Determine # Sig figs in each # in the question.
- ③ Answer has same # Sig figs as the # in question with the **fewest** sig figs.

Sep 8-7:56 AM

Add, Subt

Answer will have the same # decimal places as # in Q with fewest decimal places.

$$\begin{array}{r}
 2.39 \text{ (2)} \\
 8.675309 \text{ (6)} \\
 1.107 \text{ (3)} \\
 \hline
 12.172309
 \end{array}$$

Sep 8-8:00 AM

② $\left(\frac{D}{1} = \frac{\text{Mass}}{\text{Volume}} \right)$ The unit you want to find goes on top (numerator)

$$\frac{0.97g \text{ Na}}{ml}, \quad \frac{194g \text{ Na}}{1}, \quad \text{Find ml}$$

$$\frac{1ml}{0.97g \text{ Na}} \times \frac{194g \text{ Na}}{1} =$$

Sep 8-8:04 AM

③ ~~Phy~~ Ate \Rightarrow ic Acid
Ite \rightarrow ous

Sulfuric \rightarrow Sulfate
 SO_4^{-2}

Iron chloride

$\text{Fe}^{+2} \text{Cl}^{-1}$
 FeCl_2
 Iron (II) chloride

$\text{Fe}^{+3} \text{Cl}^{-1}$
 FeCl_3
 Iron (III) chloride

Mg 12p, 12e-
 12p, 10e- (+2)

Sep 8-8:10 AM

Atomic Mass \rightarrow 24
~~#p~~ + #n

12 Mg +2 \leftarrow Charge


Atomic # (#p)

Atom \rightarrow 12e- (+2 ion) \rightarrow 10e-
 lose 2e-

Sep 8-8:37 AM

Endothermic

heat enters



Object

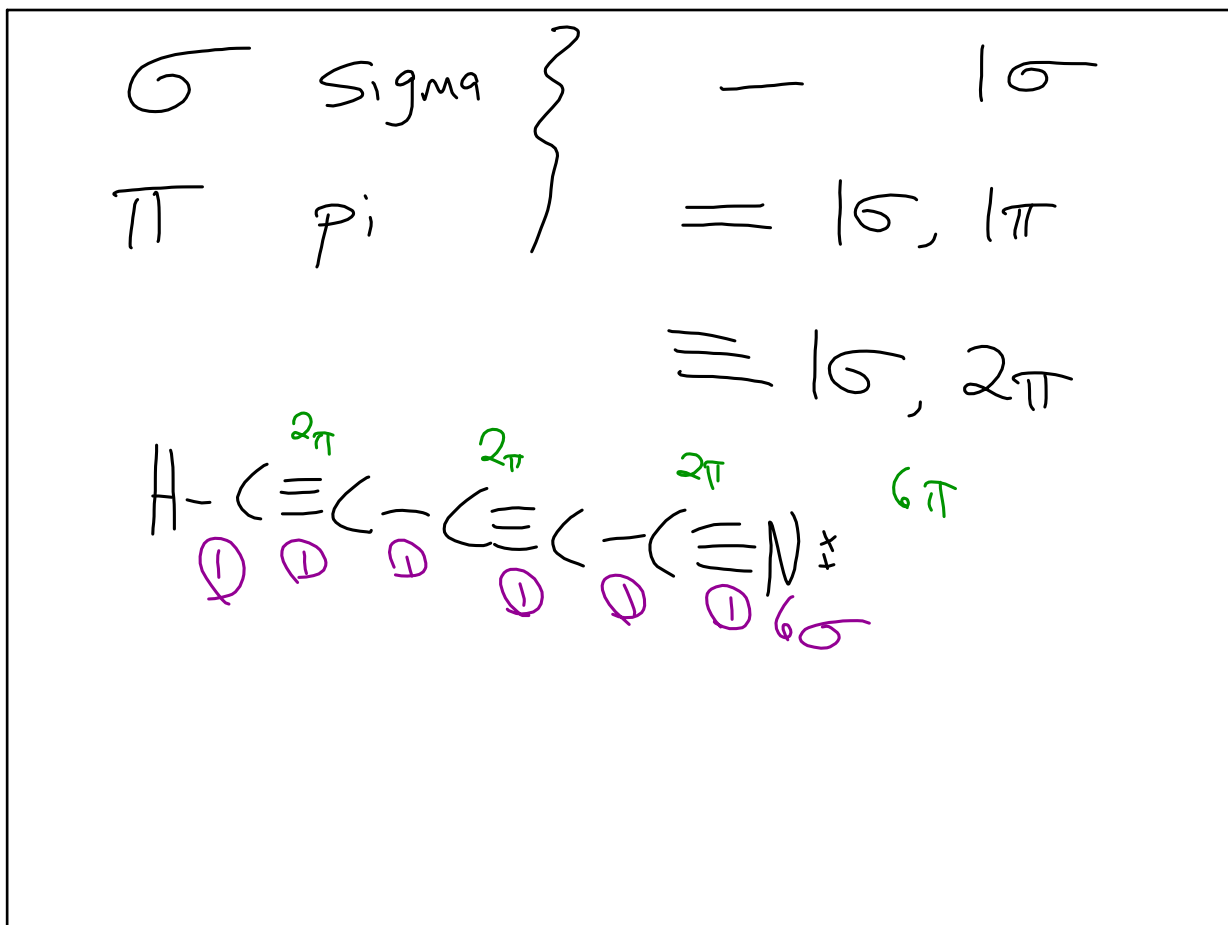
feels cold
b/c absorbing
heat energy

Exothermic

heat exits

feel HOT

Sep 8-8:39 AM



Sep 8-9:02 AM

$\frac{1 \text{ mole}}{6 \times 10^{23} \text{ particles}}$, $1 \times 10^{22} \text{ molecules SO}_3$
? moles O

elements $\xrightarrow{\text{Chem. change (combine)}}$ compound
 atoms $\xrightarrow{\text{dashed line}}$ molecule
 (atoms: smaller part with same properties)

H_2O \rightarrow Put fire out
 H_2 Flammable
 O_2 Combustible, supports burning

Sep 8-9:06 AM

$\frac{1 \text{ mole}}{6 \times 10^{23} \text{ particles}}$, $1 \times 10^{22} \text{ molecules SO}_3$, ? mole O

$\frac{1 \text{ mole O}}{6 \times 10^{23} \text{ atoms O}} \times \frac{3 \text{ mole O}}{1 \text{ mole SO}_3} \times \frac{1 \times 10^{22} \text{ molec.}}{1}$

Sep 8-9:15 AM

$$1.14 + 1.18$$

P.31

Sep 8-9:17 AM