Noteset 16 : Operations with A and P (rounding)

Addition / Subtraction

① Add/Subt. quantities
② Units must be the same
③ Round to least # places after decimal

* (_) = # places after decimal

Ex: $39.6^{(1)}\,g + 82.93^{(2)}\,g$ (note: same unit, g)

$= 122.50^{(1)}\,g$; (1) digit least

$= \underline{122.5\,g}$ (1 digit after)

Ex2: $0.96^{(3)}\,m - 0.52^{(2)}\,m$ (2) digit least

$= 0.441^{(2)}\,m = 0.44\,m$

unrounded rounded

Multiplication and Division

Units

Multiply

$g \cdot g = g^2$

mult

Divide

m/s or $m \div s$

$= \frac{m}{s}$ ↑ divide

Steps

① Mult/Div quantities
② Mult/Div units

③ Round to 2 digits if over 2 / if less than don't round.

Ex: $39.2\,g \cdot 41.36\,g$ (1) least # after dec.
(1) (2)

$= 1621.312\,g \cdot g = 1621.3\,g^2$
(1) unrounded (1) rounded

Ex2 $312.62\,m \div 2.3\,s$

$\frac{312.62\,m}{2.3\,s} = \frac{312.62}{2.3}\ m/s$ (2) (1)

$= 135.9217\,m/s = 135.9\,m/s$
(1) unrounded (1) rounded