

Parts of a measurement

Measure: Quantity + Unit + Label
23.1g H₂O 23.1 g H₂O

Accur. of quan.
Last digit is unknown
(unk)

23.1
known unk

RE known: Correct
Exp: Measured

$$RE = \frac{\text{Exp} - \text{known}}{[\text{Exp}]} \quad [\text{known}]$$

$$RE = + \quad \text{Exp} > \text{known}$$

$$RE = - \quad \text{Exp} < \text{known}$$

$$RE = 0 \quad \text{Exp} = \text{known}$$

$$RE = \text{Exp} - \text{known}$$

known: 49.4g Exp: 45.1g

$$RE = 45.1g - 49.4g$$
$$= -4.3g \quad [-]$$

Rounding

Add/Subt: rnd to
least # digits after decimal

$$45.\underset{(2)}{60}g + 23.\underset{(1)}{6}g$$

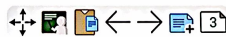
$$= 69.\underset{(1)}{2}g$$

Mult./Div.: rnd to
2 places after dec.*
(or less)

$$235.2g / 129.4mL$$

$$= 0.\underset{(2)}{1792}g/mL$$

$$= 0.\underset{(2)}{18}g/mL$$



① $M = \text{---}g$ $V = \text{---}mL$ $D = \text{---}g/mL$
Find $D = \frac{M}{V}$

② $V = \text{---}mL$ $D = \text{---}g/mL$ $M = \text{---}g$
Find $M = V \cdot D$

③ $M = \text{---}g$ $D = \text{---}g/mL$ $V = \text{---}mL$
Find $V = \frac{M}{D}$

A	$D = \frac{M}{V}$
B	$M = V \cdot D$
C	$V = \frac{M}{D}$
	<u>units</u>
M:	g
V:	mL
D:	g/mL

