

Metric Conversions

M mega 10^6	k	h	da	g, L, m	d	c	m	μ micro 10^{-6}
	kilo	hecto	deca	base	deci	centi	milli	
	10^3	10^2	10^1	10^0	10^{-1} ($\frac{1}{10}$)	10^{-2} ($\frac{1}{100}$)	10^{-3} ($\frac{1}{1000}$)	

$\times 10^n$ (move dec right) \rightarrow

$\div 10^n$ (move dec left) \leftarrow

29. $4008g = 4008000 \text{ mg}$ (move dec)

(factor labelling) $x \text{ mg} = 4008g \left(\frac{1000 \text{ mg}}{1g} \right) = 4008000 \text{ mg}$

↑ what you want ↑ start with ↑ conversion factor

30. $48 \text{ mL} = 0.048 \text{ L}$ (move dec)

$x \text{ L} = 48 \text{ mL} \left(\frac{1 \text{ L}}{1000 \text{ mL}} \right)$ (factor labelling)

$= 0.048 \text{ L}$

$48 \text{ mL} = 48 \times 10^{-3} \text{ L}$ (use the prefix if going to base unit)

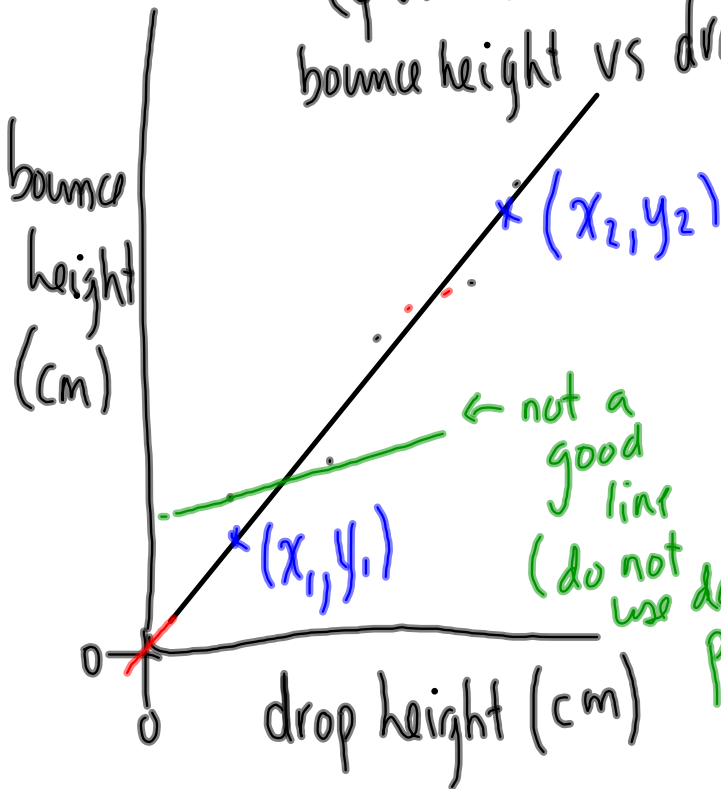
$= 4.8 \times 10^{-2} \text{ L}$

31. $239 \text{ mm} = 23.9 \text{ cm}$

32. $38 \text{ kg} = 38000000 \text{ mg}$

Bounce that Ball

(y vs x)
bounce height vs drop height



Slope

$$m = \frac{\Delta y}{\Delta x}$$

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

$$y = mx + b$$

↑
↑
↑
?