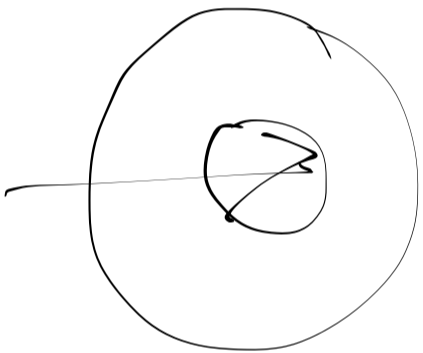


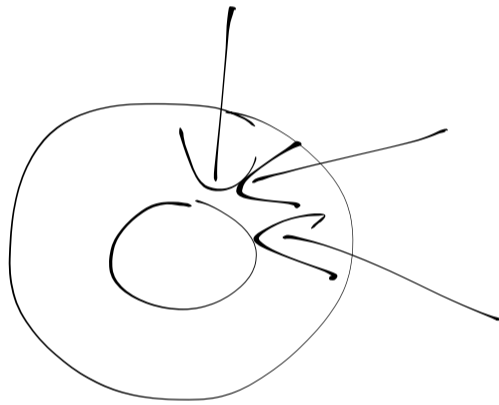
Block 4 Aug 27

Quiz Fire drill
evacuation

Accuracy + precision → - how well we can repeat measurement
↳ how close to "true" value
- how many places we can measure
more graduations = more precise

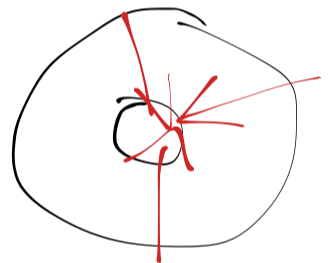


acc? Y



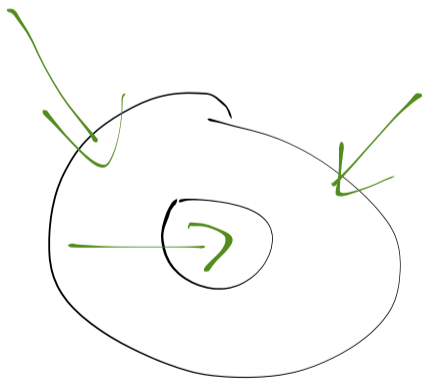
acc? N

prec? Y



acc? Y

prec? Y



prec? ~~Y~~ N

acc? Y

Significant figures help us to communicate

more digits = more precise

Rules

1. non-zero digits ARE significant

123 3sf 45 2sf

2. zeros between sig figs ARE sig.

607 8.091
3sf 4sf

3. Leading zeroes are NOT sig.

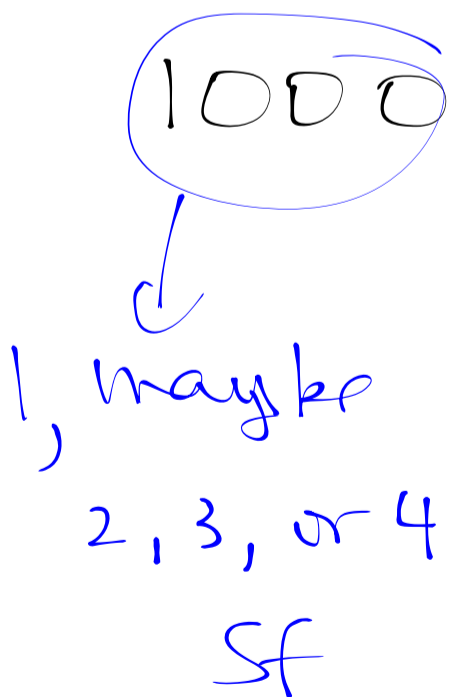
0.23 2sf 0.0405 3sf

4. Trailing zeroes after decimal ARE sig

6.0 2sf 6.00 3sf 0.7080

5. Trailing zeroes before decimal may be sig

ambiguous



1.000×10^3	4sf
1.00×10^3	3sf
1.0×10^3	2sf
1×10^3	1sf

sig figs in mult. and division

1. determine # of sf's in each factor

2. id. fewest # of sig figs 

3. round answer to that # of sf's

$$17 \div 3 = 5.66\bar{6}$$

2
1
1
6

sig figs in addition and subtraction

1. line up #'s on decimal like in 4th grade
2. id. column of least precision
3. round answer to this column

$$\begin{array}{r}
 123 \\
 + 45.6 \\
 \hline
 \end{array}$$