CONCEPT: COUNTING SIGNIFICANT FIGURES (SIG FIGS)

● In Physics, measurements have **PRECISION**, indicated by the # of digits**:**

10 kg	10.27 kg
[LESS | MORE] precision	**[LESS | MORE]** precision

● Not ***all*** digits in measurements matter**.** Significant Figures are the # of digits that _____**.**

15 kg	015 kg
# digits given**:** _____	# digits given**:** _____
# digits that matter**:** _____	# digits that matter**:** _____

EXAMPLE**:** Determine the number of significant figures in the number below**:**

0.013200972000

_____ 0s _____ 0s _____ 0s

# of Significant Figures: _____

STEPS

1) Eliminate Leading 0's

2) If # has no decimal, eliminate Trailing 0's

3) Count remaining digits
- *Never* eliminate non-zeroes or Middle 0's

EXAMPLE**:** How many significant figures are there in each of the following numbers?

a) 100.00 **b)** 0.0043 **c)** 31000092

d) 100 **e)** 73917000 **f)** 0.00900

PRACTICE**:** How many significant figures are in each of the following numbers?

a) 0.0032 **b)** 10790 **c)** 08.02