

NAME: _____

Study Guide Significant Figures

How many significant figures are in the following numbers? Indicate exact numbers with an infinity symbol.

	# Sig Figs.		# Sig Figs.
a. 0.103 cm		i. 2, 300 g	
b. 2.306 in		j. 8.10 L	
c. 21		k. $2.40603 \times 10^5 \mu\text{m}$	
d. 0.032 mL		l. 0.000200 kg	
e. 1000 mL/L		m. 144	
f. 100. Lbs		n. 1001 tons	
g. 85 boxes		o. 340. lbs	
h. 0.0140 in		p. 24 hours/day	

Round off to the digit underlined. **Example:** $10\underline{1}4 \rightarrow 1010$

	Answer		Answer
a.) $876.\underline{5}5$		f.) $43.\underline{7}6$	
b.) $7\underline{6}.233$		g.) $1.2\underline{0}5 \times 10^{-3}$	
c.) $679.\underline{9}54$		h.) $\underline{3}.45 \times 10^6$	
d.) $0.00\underline{3}56$		i.) $5.\underline{5}55 \times 10^2$	
e.) $2\underline{4}.5$		j.) $6.5\underline{6}56$	

Convert the following to scientific notation

	Scientific Notation		Scientific Notation
850095		0.000085	
175000		0.00689	
657800		0.0009642	

How many significant figures are present in the following numbers?

85.320000		0.0020600	
1000.		140000	
1000.1000		50000	
0.0001200		50000.	
45		5000.0000	
325,980 cm		0.00000000001	