

Solve the following problems using significant figures and the correct unit.

1. How many Significant Figs and which rule (on front) explains why: (ex. 2.12 m answer: 3 Rule # 1)

a. 3.011 cm ___ Rule #: _____ b. 0.0010 mL ___ Rule#: _____

c. 251 g ___ Rule#: _____ d. 1000 kg ___ Rule#: _____

e. 1.000×10^{-6} L ___ Rule#: _____ f. 0.012004 mg ___ Rule#: _____

g. 1,200,344 km ___ Rule#: _____ h. 11.0 L ___ Rule#: _____

2. Calculate the following addition problems using significant figures:

i. 35 mL + 0.368 mL = _____ j. 0.04 g + 0.2 g = _____

k. 2.35 mm + 4.7 mm = _____ l. 2.3×10^8 m + 3 m = _____

3. Do the following subtraction problems using significant figures:

m. 23 g - 0.05 g = _____ n. 0.345 mL - 0.05 mL = _____

o. 8.7×10^8 m - 9 m = _____ p. 13.9 L - 5 L = _____

4. Calculate these multiplication problems using significant figures:

q. 2.3 cm x 8.678 cm = _____ r. 3 g x 9 = _____

s. 5.67 km x 8 km = _____ t. 200 L x 3.78 = _____

5. Calculate these division problems using significant figures:

u. 12.6 cm / 23 cm = _____ v. 4 g / 2.345 g = _____

w. 1345.6 L / 2.34 L = _____ x. 3 g / 2.6 mL = _____