ANSWERS TO SIGNIFICANT PROBLEMS

1. For each of the following numbers, indicate the number of significant figures:

	number	number of significant figures	rule #
a)	541.2	4	1
b)	23,459	5	1
c)	2,034	4	2
d)	1.0009	5	2
e)	65.0	3	3
f)	202.0	4	2,3
g)	0.045	2	4
h)	0.0080	2	3,4
i)	4,320	3	5

2. Do the following calculations and record the answers with the correct number of significant figures:

a) 3.29 g/6.15 cm^3 = 0.530 g/cm^3 (3 significant figures)

b) 2.04 kg + 6.13 kg + 18.92 kg = 27.09 kg (4 significant figures; to hundreths place)

c) 5.23 cm x 38 cm = 2.0 cm^2 (2 significant figures)

d) 18.25 g - 3.9 g = 14.4 g (3 significant figures; to tenths place)

e) 1.283 m x 4.5 m = 5.8 m^2 (2 significant figures)