Scientific Notation and SignificantFigures

1. Rewrite the following numbers in standard scientific notation:
   a. 10459000
   b. 340900
   c. 0.05798
   d. 0.0089754
   e. 6701924
   f. 0.00004857

2. Rewrite the following numbers in decimal form:
   a. 3.45×10^{7}
   b. 6.081×10^{-3}
   c. 1.234×10^{-2}
   d. 6.094×10^{-4}
   e. 4.91×10^{3}
   f. 4.567×10^{7}

3. How many significant figures are in each of thefollowing?
   a. 259.6 cm
   b. 5000 J
   c. 0.0142 g
   d. 1.9140 atm
   f. 22001 J
   g. 3.70 m
   h. 0.01020 kg
   i. $0.00291\ m^3$

4. Perform each of the following calculations, then round your answer so that it is expressed in the correct number of significantfigures.

   a. $\dfrac{3.45 \times 10^{6}\ g}{5.78 \times 10^{3}\ mL} =$

   e. 1.16 g x 52 g=

b. 4.57m x 3.9004m =

f. 18.1 kg /12.2 kg=

c. 0.0124 L X 3.56L=

g. $\frac{4.6210\ g}{2.31\ g}$

d. 5310 m x 218.4m=

h. 4.2056 /1.5 cm=