1. Express the following measurements in scientific notation rounding to **TWO** significant digits.

a) 14 200 km \_\_\_\_\_\_\_\_\_\_\_\_ c) 487 000 kg \_\_\_\_\_\_\_\_\_\_\_\_\_ d) 0.00375 g\_\_\_\_\_\_\_\_\_\_\_

b) 0.00056 s \_\_\_\_\_\_\_\_\_\_\_\_ e) 0.0000945 g \_\_\_\_\_\_\_\_\_\_\_\_ f) 5 999 m\_\_\_\_\_\_\_\_\_\_\_\_\_

2. State the number of significant digits in each of the following quantities:

a) 809 g \_\_\_\_\_\_\_\_ g) 15 cycles \_\_\_\_\_\_\_\_ (*a count*)

b) 5.60 s \_\_\_\_\_\_\_\_ h) 0.0032050 m \_\_\_\_\_\_\_\_

c) 0.00060 cm \_\_\_\_\_\_\_\_ i) 136 000 m2  \_\_\_\_\_\_\_\_

d) 5.795 km \_\_\_\_\_\_\_\_ j) 1000 mm/m \_\_\_\_\_\_\_\_ (a *conversion factor*)

e) 120 m \_\_\_\_\_\_\_\_ k) 1.350 V \_\_\_\_\_\_\_\_

f) 0.000 003 25 kg \_\_\_\_\_\_\_\_ l) 14.50 m \_\_\_\_\_\_\_\_