Rules for Significant Digits

1. All nonzero digits are significant.
2. Zeros between nonzero digits are significant.
3. Start counting significant digits at the first nonzero digit.
4. Counted numbers and definitions do not apply to significant digits (only measurements).
5. Zeros at the end of a number without a decimal in it are not significant.
6. Zeros at the end of a number with a decimal in it (anywhere in it) are significant.

Write the number of significant digits in the following numbers. If the unit is not a measurement, then write N/A for not applicable.

a) 50 m _____
b) 0.000935 mg _____
c) 909,000 cl _____
d) 64,000 peanuts _____
e) 59,000. dag _____
f) 0.000 960 035 000 km _____
g) 600 mg _____
h) 56,000 marbles _____
i) 0.000 000 960 hl _____

Convert the following using a one-step conversion. Show all work starting with the given number and unit over one then multiply by the conversion factor.

1. 8,560 hm to m
2. 0.9400 g to mg
3. 4,500 ml to l
4. 0.000 450 dag to g
5. 40,980 m to km
6. 65.05 hl to l
7. 7.69 mg to g
8. 0.99 kl to l
9. 200 cm to m
10. 850 mm to m

Work these on a separate page.