Chpt 2R8
Physics

Perform the following conversions: show your work

a) 0.035 m = _____μm

b) 3.5 cg = _____Mg

c) 65 miles/hr = _____ m/s

List the number of significant figures in each measurement:

d) 0.0100 m

e) 100. m

f) 100 m

g) 20 g

h) 0.020 g

i) 200.000 g

j) 0.0045 ml

k) 5.045 ml

l) 45 ml

Perform the following operations to the appropriate number of sig. Figs.:

m) 65.0233 g + 3.464 g + 5.19 g =

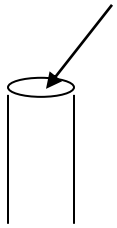
n) 65.3 g / 45.5 cm^3 =

o) 0.0200 m/s x 1.1 s =

p) 456.23 cg – 217 cg =

Find the Operational Uncertainty and % of Operational Uncertainty:

q) What is the cross-sectional area of a wire if its diameter is 5.56 x 10^{-2} mm?
($A = \pi r^2$)



r) What is the circumference of a circular running track that is 67.50 m across (diameter)?

s) The volume of a soda can that has a radius of 3.4 cm and a height of 12.4 cm?
($V = \pi r^2 h$)