

I = Intensity

I_0 = Intensity with no object

μ = attenuation coefficient (depends upon material and x-ray energy)

l = length of the x-ray path.

1.) If you were given the above formula and the information for each situation below, solve each problem.

a.) $I = 88$
 $I_0 = 100$
 $\mu = .4213$
 $l = .3034$

b.) $I = 26.6769$
 $I_0 = 30$
 $\mu = .2348$
 $l = .5$

c.) $I = 45$
 $I_0 = 36.2754$
 $\mu = .3421$
 $l = .63$

d.) $I = 32$
 $I_0 = 35$
 $\mu = .2560$
 $l = .35$