

ATTENUATION OF ELECTROMAGNETIC IONISING RADIATION

Name:

Group:.....

Date:

1. Goal of the experiment:

2. Measurement of radiation background:

a) radiation background counting time $t' =$

b) radiation background counting rate $a \pm \Delta a =$

3. Measurements of the counting rate versus absorber layer thickness x
(counting time $t =$):

THE FIRST ABSORBER:

absorber density $d \pm \Delta d =$

	absorber thickness x	counting rate $a \pm \Delta a$	lna
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

Make graphs of the function $a_x = f(x)$ and $\ln a_x = f(x)$ for the first absorber.

The absorber properties:

a) half-value layer $HVL \pm \Delta HVL =$

b) linear attenuation coefficient $\mu \pm \Delta\mu =$

c) mass attenuation coefficient $\mu_m \pm \Delta\mu_m =$

