

$$I_{1ft} = 6CEN$$

$$I_{1m} = 0.5CEN$$

$$I = \frac{6CEN(1^2)}{d^2}$$

$$I = \frac{0.5CEN(1^2)}{d^2}$$

$$X = \left(\frac{R}{E}\right)T$$

$$\text{Stay Time} = \frac{H_{allowable} - H_{received}}{\text{equivalent dose rate}}$$

$$I_1(d_1)^2 = I_2(d_2)^2$$

$$I_1(d_1) = I_2(d_2)$$

$$HVL = \frac{\ln 2}{\mu}$$

$$TVL = \frac{\ln 10}{\mu}$$

$$I = I_0 \left(\frac{1}{2}\right)^n$$

$$I = I_0 \left(\frac{1}{10}\right)^n$$

Radiation Weighting Factors	
X-rays, $\gamma$ , $\beta$ , e	1
neutrons < 10 keV	5
neutrons 10 keV to 100 keV	10
neutrons > 100 keV to 2 MeV	20
neutrons > 2 MeV to 20 MeV	10
neutrons > 20 MeV	5
protons, other than recoil protons energy > 2 MeV	5
$\alpha$ , fission fragments, heavy nuclei	