

70. (a) Using Eq. 43-31, the energy absorbed is

$$(2.4 \times 10^{-4} \text{ Gy})(75 \text{ kg}) = 18 \text{ mJ} .$$

(b) The dose equivalent is

$$(2.4 \times 10^{-4} \text{ Gy})(12) = 2.9 \times 10^{-3} \text{ Sv} = 0.29 \text{ rem}$$

where Eq. 43-32 is used in the last step.