

1/2 For a 180-lb person:

$$W = mg : 180 \text{ lb} = m (32.2 \text{ ft/sec}^2)$$

$$m = \frac{5.59 \text{ slugs}}{}$$

$$180 \text{ lb} \left( \frac{4.4482 \text{ N}}{\text{lb}} \right) = \underline{801 \text{ N}}$$

$$W = mg : 801 \text{ N} = m (9.81 \text{ m/s}^2)$$

$$m = \underline{81.6 \text{ kg}}$$