

60. (a) Choosing the direction of motion as $+x$, Eq. 2-11 gives

$$a = \frac{88.5 \text{ km/h} - 0}{6.0 \text{ s}} = 15 \text{ km/h/s} .$$

Converting to SI, this is $a = 4.1 \text{ m/s}^2$.

- (b) With mass $m = 2000/9.8 = 204 \text{ kg}$, Newton's second law gives $\vec{F} = m\vec{a} = 836 \text{ N}$ in the $+x$ direction.