

36. With $v = 96.6 \text{ km/h} = 26.8 \text{ m/s}$, Eq. 6-17 readily yields

$$a = \frac{v^2}{R} = \frac{26.8^2}{7.6} = 94.7 \text{ m/s}^2$$

which we express as a multiple of g :

$$a = \left(\frac{a}{g} \right) g = \left(\frac{94.7}{9.8} \right) g = 9.7g .$$