Problem 4.27

This is a very easy centripetal force problem.
The sketch to the right looks down from above.

$$a_r = \frac{v^2}{R}$$

$$= \frac{(20.0 \text{ m/s})^2}{(1.06 \text{ m})}$$

$$= 377 \text{ m/s}^2$$

$v = 20.0$ m/s

a_r

R = 1.06 m

1.)