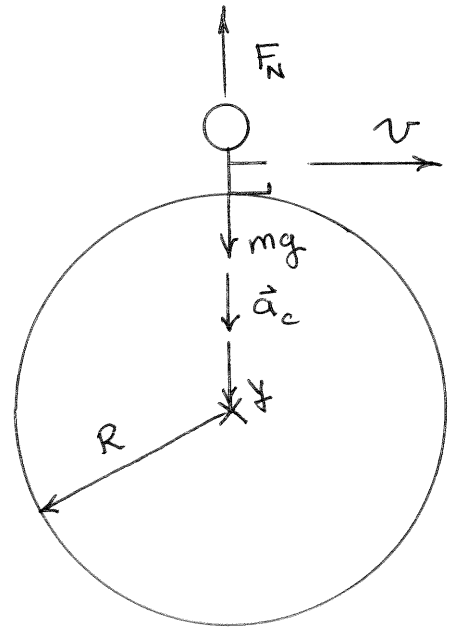


CENTRIPETAL FORCE PROBLEMS

- 1) MARK CENTER OF ROTATION "X"
- 2) DEFINE COORDINATES \Rightarrow
 $+ \hat{y}$ TOWARD CENTER OF ROTATION



FERRIS WHEEL

- 3) FREE BODY DIAGRAM
- 4) NEWTON'S SECOND LAW

$$+mg - F_N = ma_c = m \frac{v^2}{R}$$

- 5) SOLVE FOR UNKNOWN(S)