Physics, Preparation for Tuesday, Oct. 31

Read N2 from *Six Ideas*

Presentations

Problem Presentations

1. Emma, N1M.7, p. 18
2. Will, N1R.3, p. 19
3. Hexi, N2B.8, p. 35
4. Trey, N2M.5, p. 36
5. Jack, N2M.7, p. 37
6. Rebecca, N2M.8, p. 37

Theory Presentation

The derivation of $|\vec{a}| = \frac{|\vec{v}|^2}{r}$, with the direction of $\vec{a}$ being toward the center, for uniform circular motion, p. 15.

Comment:

Maintaining uniform circular motion requires a “centripetal” force.

If you are going in a circle, it may feel like you are being flung outward, and this illusion is commonly referred to as “centrifugal” force. The truth is that you must be constantly tugged toward the center of the circle, whether by a cable or a railing, as in Emma’s problem.

An extremely good thing to contemplate is what happens if the cable snaps. Are you flung outward!?!