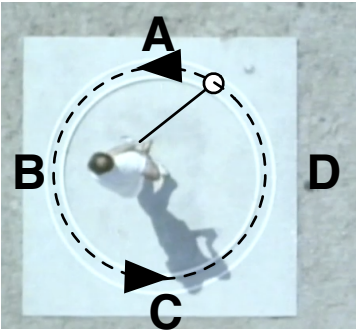
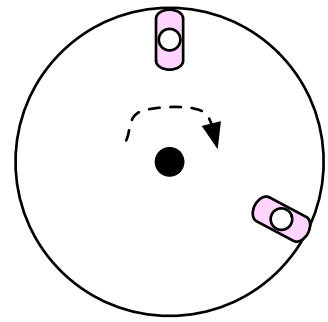


Wk 23 Circular Motion

name: _____

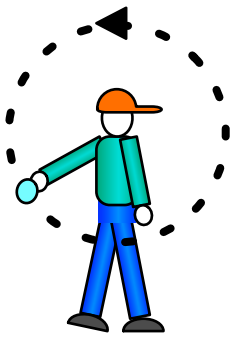
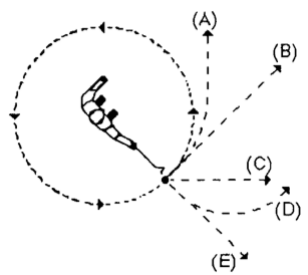
1 Regular Velocity is Tangent

1. At right is the top view of a playground merry-go-round. if the person were to fall off at the moments shown, draw tangent arrows to show her path.



2. The red arrows show which way the hammer thrower is supposed to throw the hammer. At which point should he release it - when the ball gets to A, B, C or D?

3. A heavy ball is attached to a string and swung in a circular path as shown in the diagram. At the point shown, the string suddenly breaks. Which path is the one the ball will actually follow - A, B, C, D, or E?



4. (Tricky!) Softball pitchers move the ball around in a circular motion before releasing the ball. Draw an arrow to show the tangential velocity at the point should the pitcher release the ball to get maximum Range.

Wk 23 Circular Motion

name: _____

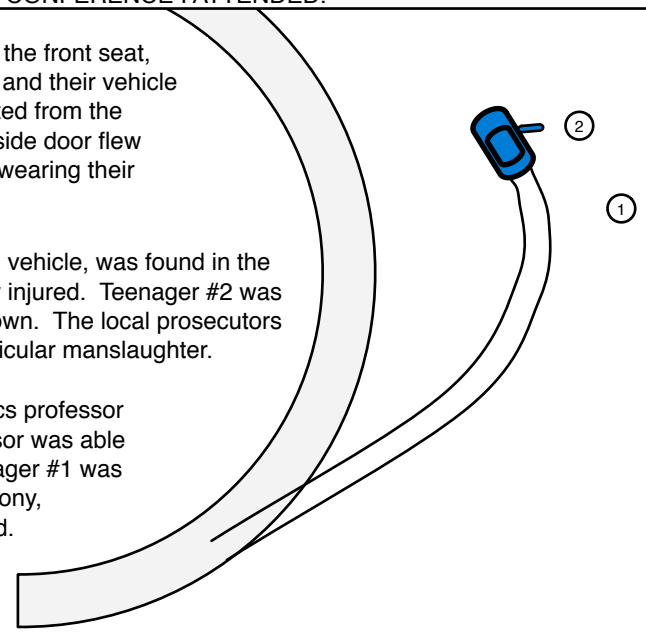
WOW - accident mystery

THE FOLLOWING STORY IS TRUE. IT COMES FROM THE PHYSICS PROFESSOR WHO TESTIFIED AT THE TRIAL - HE LATER SPOKE ABOUT IT AT A PHYSICS CONFERENCE I ATTENDED.

Two teenagers, both riding in the front seat, rounded a turn much too fast and their vehicle left the road. Both were ejected from the vehicle when the passenger side door flew open because they were not wearing their seatbelts.

Teenager #1, the owner of the vehicle, was found in the position shown and was badly injured. Teenager #2 was found dead in the position shown. The local prosecutors charged teenager #1 with vehicular manslaughter.

The defense called in a physics professor to testify. The physics professor was able to present evidence that teenager #1 was innocent. Based on the testimony, teenager #1 was not convicted.



WHAT EVIDENCE DID THE PHYSICS PROFESSOR PRESENT?