Nishimura Rua 1000

Videotape Problem

A fan will start and eventually reach its fastest rotational speed.

Consider what is happening when it reaches its fastest rotational speed.

A marker (piece of tape) on 1 of the 3 fan blades will help you watch it.

Now Watch the Videotape

- At what speed is the fan rotating? Explain.
- Are there other rotational speeds that would give a video identical to what you have just seen (when the fan is rotating at its fastest speed)?
- Why does the fan appear to be nearly stationary in the video?