Cycle 20 Circular Motion

3 Centripetal Accel

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   a) What is the angular velocity of the car?
   b) What is the tangential velocity of the car?
   c) What is the car's centripetal accel? How many g's does the driver feel?

2. We crank up Harvey on the turntable to 78 revolutions per minute. He's 0.3 m from the center.
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3. You are a road engineer designing a curve on a new highway. The curve will have a radius of 195 m. You don't want to exceed half of a g of acceleration on the curve. What should the speed limit be?

[DU problem] You are in charge of the pilot training centrifuge. Time to crank those pilots up to 9 g's!

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b) How long will it take for one rotation?

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