Name: _____   Date:_____
Mr. Croom's Physics   Chapter 7: Rotational motion

Angular Acceleration

Solve the following problems

1. If a tire increases its angular velocity from 3 rad/s to 21 rad/s in 2 seconds, what is its angular acceleration?

2. If a person's angular acceleration is 5 rad/s^2 what is their change of angular velocity in 3 seconds?

3. If a wind mills angular acceleration as it start to spin from rest is 3 rad/s^2, how long does it take for it to get to its final velocity of 18 rad/s?

4. If a tire as it is braking goes from 20 rad/s to 6 rad/s, in 2 seconds, what is it angular acceleration

5. If the angular acceleration of a rotating wheel is 4 rad/s^2 and after 3 seconds of accelerating it is going 17 rad/s, what was its initial angular speed?

6. If the change in angular speed of a ball is 20 rad/s, what must its acceleration be if the change happens in 5 seconds?