

Name _____

Favorite Author _____

Show your work, and circle your answers and use sig figs to receive full credit.

1. A bicycle going 13.5 m/s has 68.0 cm diameter wheels. What is the angular velocity of the wheels in rad/s? in RPM?
2. What is the tangential velocity of a 4.50 cm radius hard drive spinning at 5200. RPM?
3. What time will it take a wheel to speed up from 12.0 rad/s to 47.0 rad/s with an acceleration of 1.40 rad/s/s?
4. A hard drive takes 4.80 s to speed up from rest to 7200. RPM. How many revolutions does it go through in doing this?
5. A car with 0.450 m radius wheels speeds up to 28.0 m/s over a distance of 112 m with an acceleration of 2.60 m/s/s. What is the initial angular velocity of the wheels?