# **ROSE-HULMAN INSTITUTE OF TECHNOLOGY**

## Department of Mechanical Engineering

### ES 204

### Quiz - Le 25

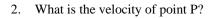
Mechanical Systems

Name: \_\_\_\_\_

The disk at right, with a radius of 0.5 ft, rolls without slipping. At the instant shown, the angular velocity is 10 rad/s clockwise and the angular acceleration is 120 rad/s<sup>2</sup> counter-clockwise.

#### Use vector algebra to obtain all solutions.

1. What is the velocity of point G?



3. What is the acceleration of point G?

4. What is the acceleration of point P?

