

**Engineering Physics I – Fall 2015**

**Quiz 9 – November 19, 2015**

**Name:**

**1. (64 points) Complete the following table:**

Linear/translational motion	Rotational motion analogue
$x$	
$v$	
$a$	
$m$	
$F = ma$	
$F = dp/dt$	
$p = mv$	
$KE = \frac{1}{2}mv^2$	

**2. (12 points) True or False**

Angular momentum is conserved if there is no net torque on the system

**3. (12 points) True or False**

Angular momentum is an intrinsic property of a moving object

**4. (12 points) True or False**

Friction must act on an item for it to roll without slipping