EE 475 Quiz #11

Name: Score

Grader:

1. Classical controllers include: **P** (proportional controller), **PI** (proportional plus integral), **PD** (proportional plus derivative), **PID**, **lead**, **lag**, and **lead-lag**. Use one or two of these to fill in the blanks below.
2. Which one is included in all other controllers?
3. Which controller is typically used to reduce a non-zero steady state tracking errors?
4. Which controller is used if a non-zero steady state error must be eliminated to zero?
5. Which two types of controllers tend to cause sluggish settling? and
6. If the root-locus does not pass through the desire region for the dominant poles, which two controllers should be used to bend the RL into the desired region? and
7. If noise is a concern, which controller should be avoided? In that case, which controller should be used as substitute(s)?
8. Both lead and lag are of the form K(s+z)/(s+p). We require 0<z<p for , but require z>p for the other.