

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

Date: \_\_\_\_\_

**Quiz 6:****Problem 1:**

Are the following true or false?

**Question****True    False**The complementary sensitivity is  $T(s) = \frac{C(s) G(s)}{1 + C(s) G(s)}$ ☐    ☐The sensitivity is  $S(s) = \frac{C(s)}{1 + G(s)}$ ☐    ☐Stability of the basic feedback control loop depends on the zeros of  $1 + C(s) G(s)$ ☐    ☐

Proportional controllers are suitable for all plants

☐    ☐

If the open loop transfer function is of type 1 and the basic feedback control loop is internally stable, then the static position error is zero.

☐    ☐**Problem 2:**

Sketch the basic feedback control loop.