Name: _____   **Date:** _____

Quiz 7:

Problem 1:

Are the following true or false?

Question	True	False
The root locus has $\min(m,n)$ branches (denominator degree n, numerator degree m)	☐	☐
The root locus plots starts $(K=0)$ at the poles of the closed-loop transfer function	☐	☐
The root locus plot shows the poles and zeros of the closed-loop transfer function	☐	☐
Each branch of the root locus plot corresponds to one closed-loop pole	☐	☐
For each pole on the root locus, the corresponding value of K can be computed	☐	☐

Problem 2:

We consider the following open-loop transfer function

$$G_o(s) = K \frac{s-1}{(s+4)(s^2+4)(s+1)}$$

Sketch in the complex plane:

- start and end points of the root locus (not at infinity)

- root locus on the real axis