

QUIZ NO. 13

NAME _____ Score _____ /10

This quiz deals with finding the open-loop gain and its application. The following questions are independent of each other.

(a.) Find the loop gain of the feedback circuit shown, $T(s)$, if the amplifier is an ideal voltage amplifier with a gain of K .

(b.) If $T(s) = \frac{sKRC}{s^2R^2C^2 + 2RCs + 1}$, find f_{osc} and the value of K necessary for oscillation.

(c.) If $T(s)$ has the following properties: $T(0) = 10$ and two poles at $s = -100$, what is the phase margin of this feedback circuit?

