King Fahd University of Petroleum & Minerals

Electrical Engineering Department

EE205: Electric Circuits II (082)

Serial # O -1 points for not writing your serial #

Ouiz 5

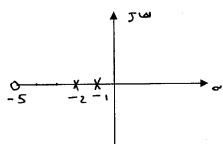
KEY Name:

Sec. 3

1. Sketch the pole-zero plot for the following transfer function $H(s)=(s+5)/(s^2+3s+2)$ (3 points)

$$H(s) = \frac{(s+5)}{(s^2+3s+2)} = \frac{s+5}{(s+1)(s+2)}$$

3ero at
$$5 = -5$$
poles at $5 = -1$ & $8 = -2$



What is the type of response for the above case (under-damped, over-damped, critical damped) (1 point)

2. Find the transfer function $H(s)=E_2(s)/E_1(s)$ for the given circuit. Assume idea op amp (6 points) Simplify your answer

This part is the same as sec 1

 $11(5) = \frac{-3}{5}$

