ECE 365/ ME 442   Q8   07/27/00

Name:
Honor Code: KEY

SKETCH THE Loci of THE Following FEEDBACK Systems:

1. $G(s)H(s) = \dfrac{1}{(s+1)(s+2)(s+3)}$

$\sigma = \dfrac{-1-2-3}{3} = -2$

$\theta = k\dfrac{180}{3} = 60°, 180°, 300°$

2. $G(s)H(s) = \dfrac{s-3}{(s+1)(s+2)(s+3)}$

$\sigma = \dfrac{-1-2-3 - -3}{2} = -4.5$

$\theta = k\dfrac{180}{2} = 90°, 270°$