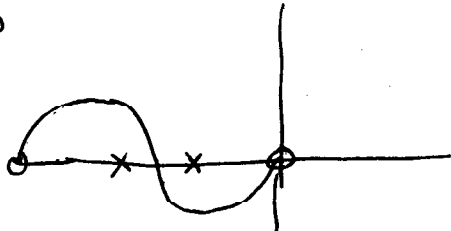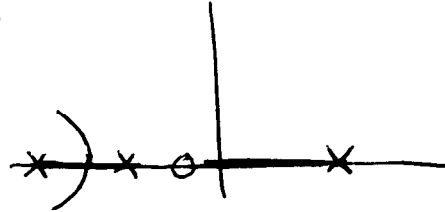1. identify which of the following could be a locus
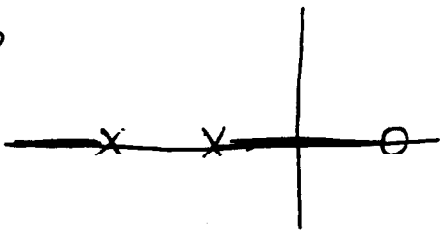
(a)
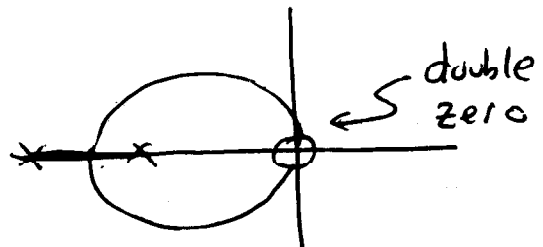

(b)
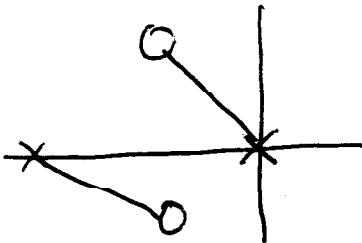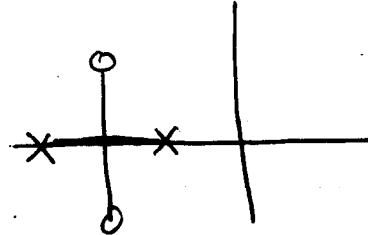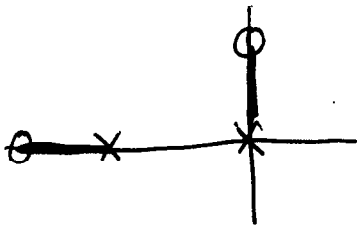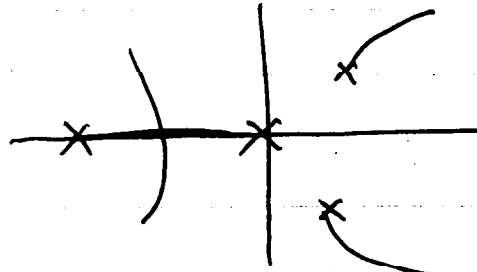

(c)

(d)

double zero

(e)

(f)

(g)

(h)

2. Sketch the root locus for each of the following

(a) $G(o) = \dfrac{K(o+2)(o+6)}{o^2 + 8o + 25}$

(c) $G(o) = \dfrac{K(o^2+1)}{o^2}$

(b) $G(o) = \dfrac{K(o^2+4)}{o^2+1}$

(d) $G(o) = \dfrac{K}{(o+1)^3(o+4)}$

3. For the pole-zero plot shown below, sketch the root locus & find the breakaway point
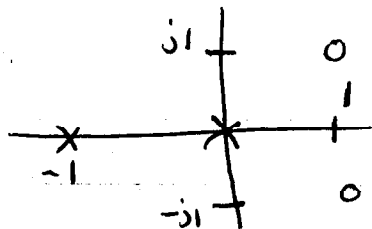
13. Plot the locus. Find all critical points

$$G(p) = \frac{K}{p(p+4)(p+8)}$$

G(p) is a unity FB system.