

ECE 3510 homework # 12

b

1. Sketch (by hand) the root-locus plots for the following open-loop transfer functions:
Mention the rules used and show work.

a) $\frac{s+2}{s \cdot (s+4)}$

b) $\frac{1}{s \cdot (s+2)}$

c) $\frac{1}{s \cdot (s+2) \cdot (s+4)}$

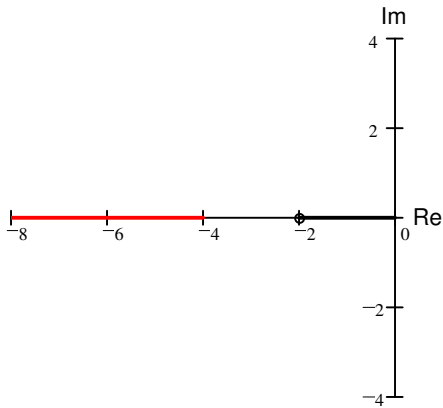
d) $\frac{s+7}{s \cdot (s+2) \cdot (s+4)}$

e) $\frac{s+3}{s \cdot (s+2) \cdot (s+4)}$

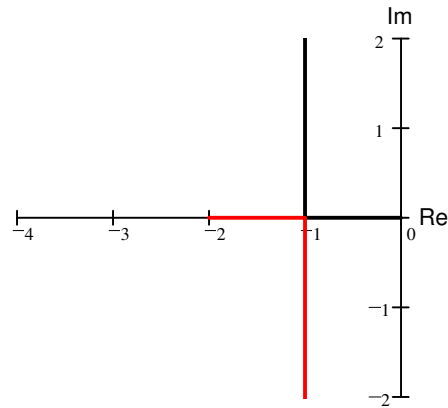
f) $\frac{8}{(s+2)^3}$

Answers

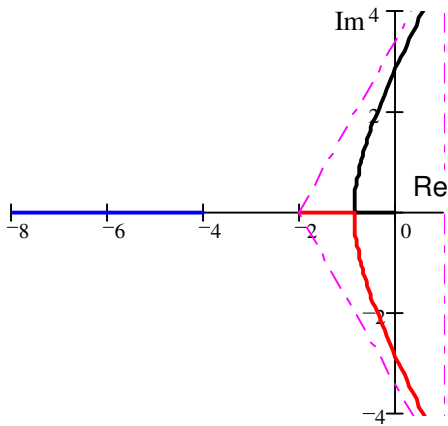
1. a)



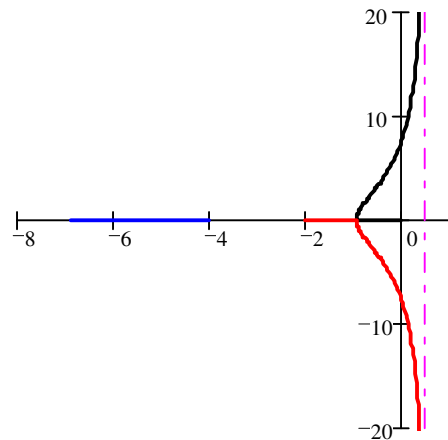
b)



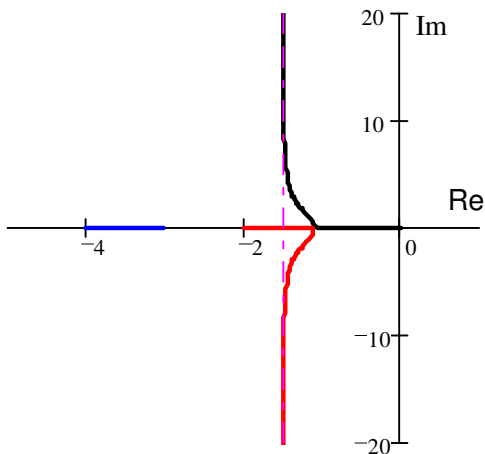
c)



d)



e)



f)

