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How to Not Fail
Control Systems

While never going to class

Computer Engineering 2020 $\boxed{\mathcal{BM}}$

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The root locus approaches straight lines as asymptotes as the locus approaches infinity. Further, the equation of the asymptotes is given by the real-axis intercept, σ_a and angle, θ_a as follows:

$$\sigma_a = \frac{\sum \text{Finite Poles} - \sum \text{Finite Zeros}}{\text{\# Finite Poles - \# Finite Zeros}}$$

$$\theta_a = \frac{(2k-1)\pi}{\text{\# Finite Poles - \# Finite Zeros}}$$

Where $k = \pm 0, \pm 1, \pm 2, \pm 3$ and the angle is given in radians with respect to the positive extension of the real axis.

8 Design via Root Locus

9 Frequency Response Techniques

10 Design via Frequency Response