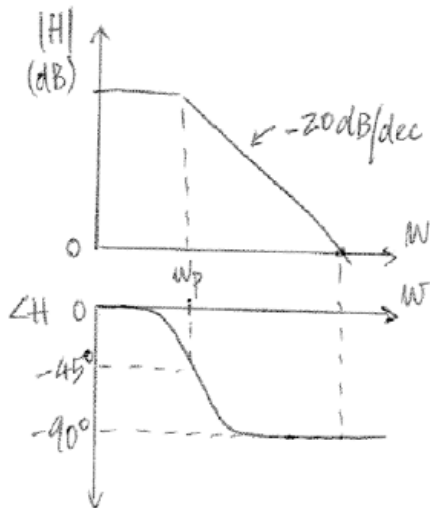


12.65

$$H(s) = \frac{A_0}{1 + \frac{s}{\omega_p}}$$

$$K = 1.$$



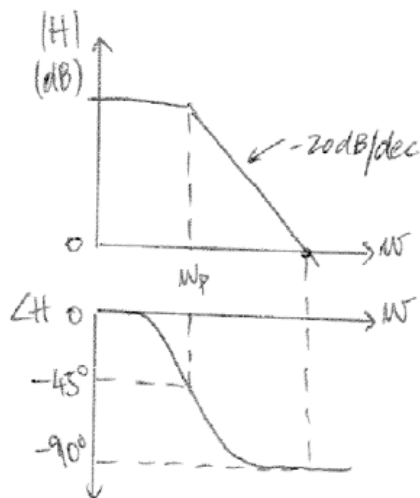
$$\therefore \text{Phase margin} = 180^\circ - 90^\circ = 90^\circ$$

(i.e. system is stable.)

12.66

$$H(s) = \frac{A_0}{1 + \frac{s}{\omega_p}}$$

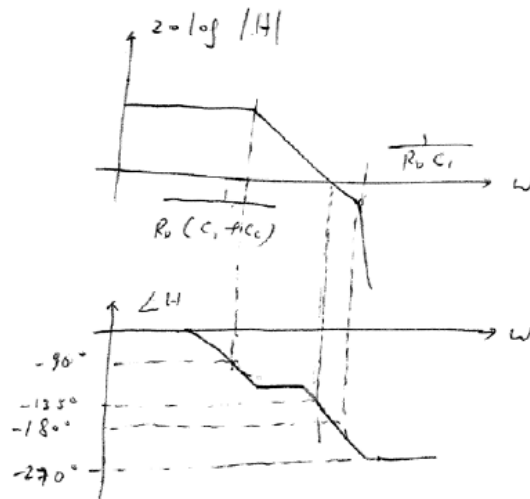
$$K = 0.5$$



Phase margin = 90°
(independent of K for one-pole systems.)

12.70

With the compensation capacitor C_c in place, the pole associated with C_c becomes dominant (i.e. at a lower frequency than the other 2 poles at $\frac{1}{R_D C_1}$).



9.1.1 $n=11$

9.1.2 $V_0=1.9V$

$$9.1.7 \quad V_0 = \frac{V_R V_{REF}}{3R \cdot 2^n} \sum_{i=0}^{n-1} 2^i D^i$$

9.2.1 $t=5\mu s$

9.2.5 $t=3\mu s$

9.2.6 $V_1 < V_{REF}$

9.2.7 $V_1 = -1.107V$

9.2.11 流水线 10 个；并行 1023 个

9.2.12 转换级数，转换时间，采样时间

9.2.13 全并行 (Flash, A/D)