- HW #2 is due today 11:59 pm
- Midterm -1   Wed (04/29)

- Multiple choice
- True / False
- Fill in values → accuracy of ±5%
- Midterm Max – 30 pts
    Questions will be of 1 pt
                          2 pt
                          3 pt

- Keep your worksheet / scratch sheet to show the progress.
- Upto lecture 12 will be in the Midterm-1
    (including)

Power loss (dBs) = $-20 \log(e^{-\alpha})$ ←

= $20\alpha \log(e)$
           $\underbrace{\quad}_{10}$

$\alpha \, 20 \times 0.434$

$$\boxed{\text{Power loss (dB)} = 8.68 \, \alpha}$$

$\alpha = 1$ → $8.68 \, dB$

ex: Power loss $20 dB = 8.68\alpha$

$\alpha = \dfrac{20}{8.68} = 2.304 \text{ nepers/m}$

osc

$V_1^+ + V_1^- = 60v$

$V_1^+ + V_1^- + V_2^+ + V_2^- = 30v$

$\Gamma_L = 1$
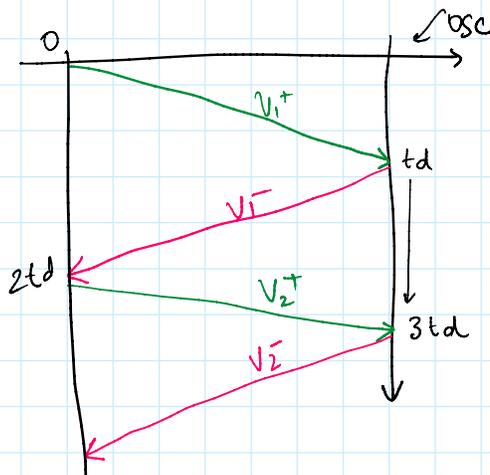
$V_1^- = \Gamma_L V_1^+$

$\Gamma_G \; V_1^+$

$V_1^+ = V_S \cdot \dfrac{Z_0}{Z_0 + R_S}$

$$V_1^+ + V_1^- = 60v$$

$$V_1^+ + V_1^- + V_2^+ + V_2^- = 30v$$

$$\Gamma_L = 1$$
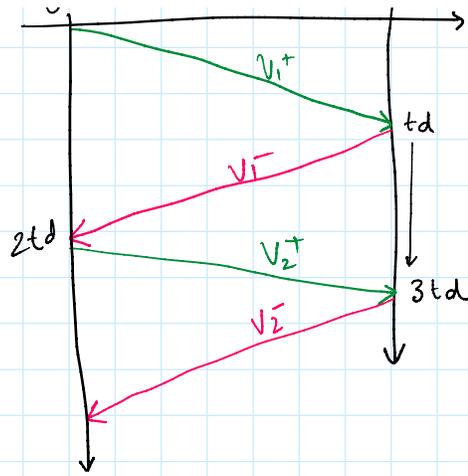
$$V_1^- = \Gamma_L V_1^+$$

$$\Gamma_G \quad V_1^+$$

$$V_1^+ = \frac{V_s \cdot Z_0}{Z_0 + R_s}$$

$$\Gamma_G = \frac{R_s - Z_0}{R_s + Z_0}$$