

Worksheet 7.3

see equation (7.3.1)

$$\mu_{\text{O}} := 4 \cdot \pi \cdot 10^{-7} \quad \mu_{\text{r}} := 1 \quad \varepsilon_{\text{O}} := 8.854 \cdot 10^{-12} \quad \varepsilon_{\text{r}} := 4$$

$$r_{22} := \frac{3.3}{2} \quad r_{33} := \frac{6}{2}$$

$$Ro := \frac{1}{2 \cdot \pi} \cdot \sqrt{\frac{\mu_{\text{O}} \cdot \mu_{\text{r}}}{\varepsilon_{\text{O}} \cdot \varepsilon_{\text{r}}}} \cdot \ln\left(\frac{r_{33}}{r_{22}}\right) \quad Ro = 17.923$$