FORMULAS

$$\text{Compressive force} = \left(\text{tension} \times \frac{\text{height}}{\text{length}}\right)$$

$$\text{Conductor tension} = \frac{\text{conductor weight} \times \text{span}^2}{8 \times \text{sag}}$$

$$\text{Conductor weight} = \frac{\text{span A} + \text{span B}}{2} \times \text{weight per unit} \times \text{SF}$$

$$\text{kVA} = \frac{(\text{V1} \times \text{I1}) + (\text{V2} \times \text{I2})}{1\ 000}$$

$$\text{Pull} = \frac{\text{weight} + (10\%\ \text{weight} \times \#\ \text{of sheaves})}{\text{MA}}$$

$$\text{Ratio} = \text{primary voltage} \div \text{secondary voltage}$$

$$\text{Ruling span} = \text{average span} + \frac{2}{3}(\text{maximum span - average span})$$

$$\text{WYE phase-to-phase voltage} = \text{phase-to-ground voltage} \times 1.73$$