

$$F := 90.8 \quad x := 0.504 \quad \alpha := 47.9\text{deg}$$

$$\beta := 74.43\text{deg}$$

Given

$$-F + A_h + \sin(\alpha) \cdot S_b + \sin(\beta) \cdot S_c = 0$$

$$A_v - \cos(\alpha) \cdot S_b - \cos(\beta) \cdot S_c = 0$$

$$-M_a + F \cdot x - S_b \cdot x \cdot \sin(\alpha) - S_c \cdot x \cdot \sin(\beta) = 0$$

$$-F + B_h + S_c \cdot \sin(\beta) = 0$$

$$-S_a - B_v - S_c \cdot \cos(\beta) = 0$$

$$-M_b + F \cdot x + S_a \cdot x \cdot \tan(\alpha) - S_c \cdot \frac{x \cdot \tan(\beta - \alpha)}{\cos(\alpha)} = 0$$

$$-K + C_h + S_b \cdot \sin(\alpha) = 0$$

$$-S_a - S_b \cdot \cos(\alpha) - C_v = 0$$

$$-F + A_h + B_h + C_h = 0$$

$$A_v - B_v - C_v = 0$$

$$F \cdot x - M_a - M_b - B_v \cdot x \cdot \tan(\alpha) - C_v \cdot x \cdot \tan(\alpha) = 0$$

Find($A_v, B_v, C_v, A_h, B_h, C_h$) \rightarrow