

Slide 49:

For instrumentation amplifier: $v_B - v_A = \left(1 + \frac{2R_1}{R_2}\right)(v_{i2} - v_{i1})$ and $v_o = \frac{R_4}{R_3}(v_B - v_A)$

$$\rightarrow \text{Gain} = \frac{R_4}{R_3} \left(1 + \frac{2R_1}{R_2}\right)$$

$$\text{Here, } R_G = R_2; R_1 = 25 \text{ k}\Omega; R_3 = R_4 = 60 \text{ k}\Omega \rightarrow \text{Gain} = \left(1 + \frac{2 \times 25}{R_G}\right)$$