

$$V_i = V_s - V_f$$

$$V_f = \left(\frac{R_1}{R_1 + R_2} \right) V_o$$

$$= W V_o$$

$$W = \frac{R_1}{R_1 + R_2}$$

$$A_V = \frac{1}{W}$$

$$= 1 + \frac{R_2}{R_1}$$

