



$$V_{FO} = 2(V_2 - V_1) \quad 1.$$

$$V_x = \frac{3.3}{\left(2 + \frac{4.7K}{200K + \frac{1}{G}} + \frac{4.7K}{200K + R}\right)} \quad 2.$$

$$\text{When } R = 0, \quad G = \frac{(V_2 - 4590)}{(-204590(V_2))} \quad 3.$$

$$V_2 = \frac{V_x}{G(200K) + 1} \quad 4.$$

$$V_1 = \frac{(V_x)R}{200K + R} \quad 5.$$