

Solution 2 (Using $V_i = -0.14[V]$)

$$A_{isc} \cdot \left[0.001[A]_{rms} \left(\frac{300[\Omega]}{400[\Omega]} \right) \right] = - \left(\frac{-0.14[V]}{20[\Omega]} (30[\Omega]) - 0.14[V] \right) \frac{+0.14[V]}{20[\Omega]}$$

$$\rightarrow A_{isc} = 18.86 [A/A]$$

~~$A_{vo} = V/V$~~

$$(A_{vo})(-0.14[V]) = \left(\frac{-1[V]_{rms}}{150[\Omega]} \right) (50[\Omega]) - 1[V]_{rms}$$

$$\rightarrow A_{vo} = 9.42 [V/V]$$