Chapter 5, Solution 4.

$$v_0 = Av_d = A(v_2 - v_1)$$

 $v_2 - v_1 = \frac{v_0}{A} = \frac{-4}{2x10^6} = -2\mu V$

$$v_2 - v_1 = -2 \mu V = -0.002 \text{ mV}$$

 $1 \text{ mV} - v_1 = -0.002 \text{ mV}$
 $v_1 = 1.002 \text{ mV}$