ECE 3 HW 7

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We have that

$$I_{body} = \frac{120.001}{400M + 200k} = 299.852nA$$

Therefore we must have

$$V_{s^-} = 59.970V$$

and

$$V_{s^+} = 60.031V$$

From virtual short principle we must have $V_{s^-} = V_2$ and $V_{s^+} = V_1$, therefore from the voltage divider princple we must have that $v_n = v_p = 54.518V$ for the right most op amp. Therefore we must have that the current flowing across the upper 10k ohm resistor is

$$V_{s^+} - v_p 10k = 0.551A$$

Therefore we must have that that

$$V_o = \boxed{-609mV}$$