## Special Problem 5.6-1

In the circuit below,  $Q_1$  has  $K_1=2$  mA/V<sup>2</sup> and  $V_{t}=2.0$  V.

But,  $Q_2$  has  $K_2 = 1$  mA/ $V^2$  and  $V_t = 2.0$  V.

In other words  $Q_1 \ \text{and} \ Q_2 \ \text{are} \ \text{not} \ \text{identical!}$ 

- 1) Determine R so that the drain current of  $Q_1$  is 8 mA.
- 2) What then is the drain voltage of  $Q_2$ ?

