Special Problem 5.5-2

The transistor in the circuit below has a DC drain-to-source voltage of 6.0 volts.

The transistor is operating in the ideal region for small signal amplification.

The output resistance r_{\circ} of the transistor is 50 K ohms.

What is the small signal gain of this amplifier $(A_v = v_o/v_i)$?

