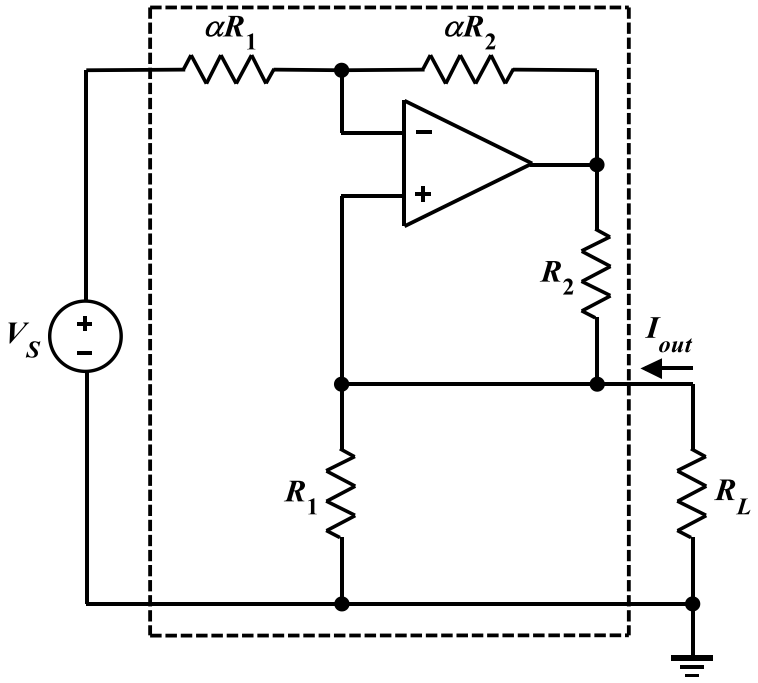
EE 4474/5574

Homework Problem #005



Using the circuit from Homework Problem #004 (copied above), design a voltage-to-current converter to meet the following requirements:

(a) $V_S = 5$ V .

(b) $I_{out} = 10$ mA when the load resistance R_L varies from 100 Ω to 500 Ω.

(c) The current drawn from the source V_S is no larger than 0.5 mA.

(d) The op amp output voltage is no larger than its saturation value of $V_{sat} = 20$ V .