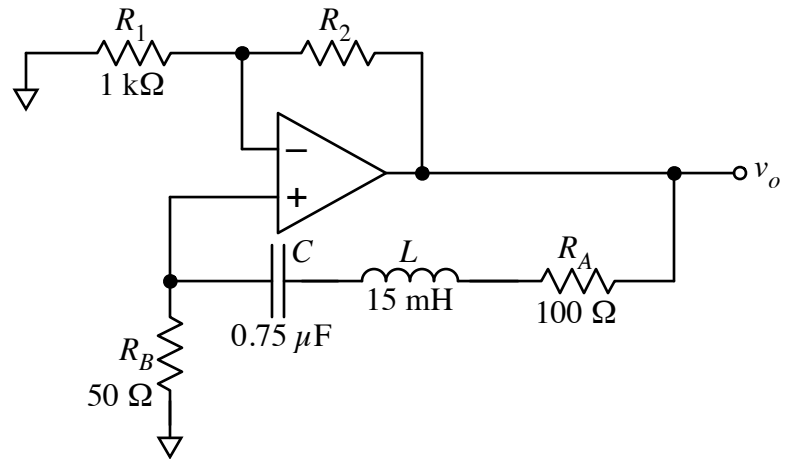The oscillator circuit at right consists of a non-inverting amp with an *RLC* tank circuit.

Determine the loop gain function for the circuit.

From the loop function, calculate the value for the oscillation frequency. Calculate the minimum of R_2 needed to ensure oscillation.

R_1

1 kΩ

R_2

C

L

15 mH

R_A

100 Ω

v_o

0.75 μF

R_B

50 Ω

$L(s) = $ _____

$f_o = $ _____; $R_2\,(\text{min}) = $ _____

Write your answers — and whatever work will fit — on this sheet. Staple any sheets with additional work behind.