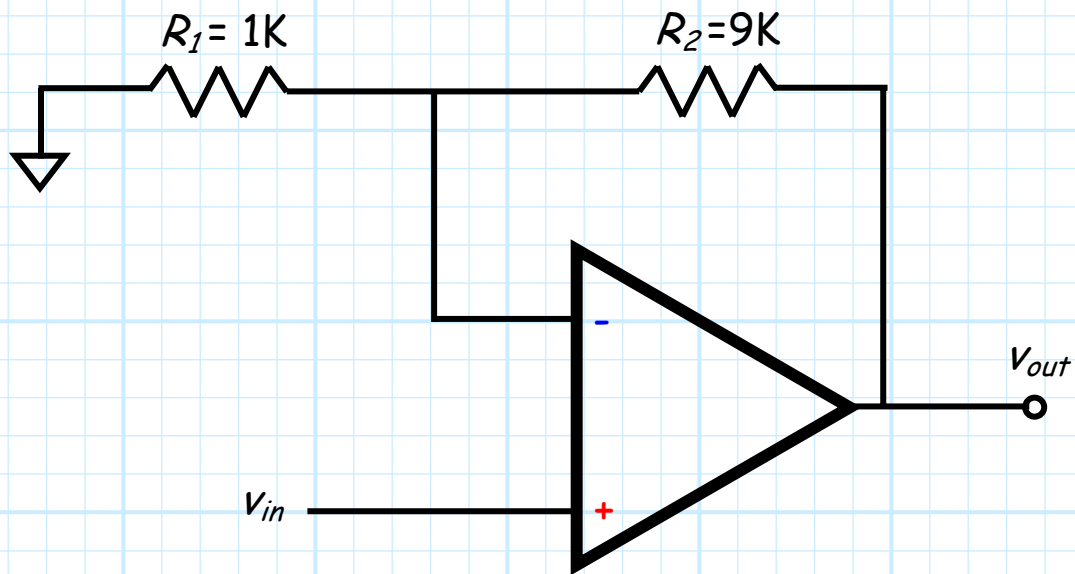


Special Problem 2.5-3

The amplifier below has a 3 dB **bandwidth** of 100 kHz.



- 1) What is the **gain-bandwidth product** of the op-amp used in this amplifier?
- 2) At what **frequency** is the magnitude of the amplifier gain **equal to one** ?
- 3) What would the **3 dB bandwidth** of this amplifier be if we changed R_2 to **99 K Ω** ?
- 4) Say we **replace** the op-amp with one having a gain-bandwidth product of **100 kHz**. What is the **3 dB bandwidth** of this amplifier if $R_2 = 9 \text{ K}\Omega$?