Special Problem 2.4-2

Using **two** ideal op-amps, design a circuit which takes two inputs ($V_A(t)$ and $V_B(t)$) and produces at an open-circuit output the signal:

$$V_{\mathcal{O}}(t) = \frac{d V_{\mathcal{A}}(t)}{dt} - 2V_{\mathcal{B}}(t)$$

The **only** capacitor that you have available for this design has the value of **10 microfarads**.

Hint: The above equation has two mathematical operations,

differentiation and **summation** (Two op-amps and two operations - what a coincidence!).