Let the O/P of A1=V_{O1} then the O/P of A2=$(R4/R3)V_{O1}$

Voltage coming at the I/P of A1.For this kill the source Vi that is Vi=0 and the apply voltage divider concept then the voltage at I/P of A1 will be($(R4/R3)V_{O1}*R1)/(R1+R2)$.

For negative feedback to exist phase shift around the loop must be 180. (Please correct me If I am wrong)

So for A2 I/P is "-" sign and A1 I/P is "+" sign.

May I know this approach is correct or not