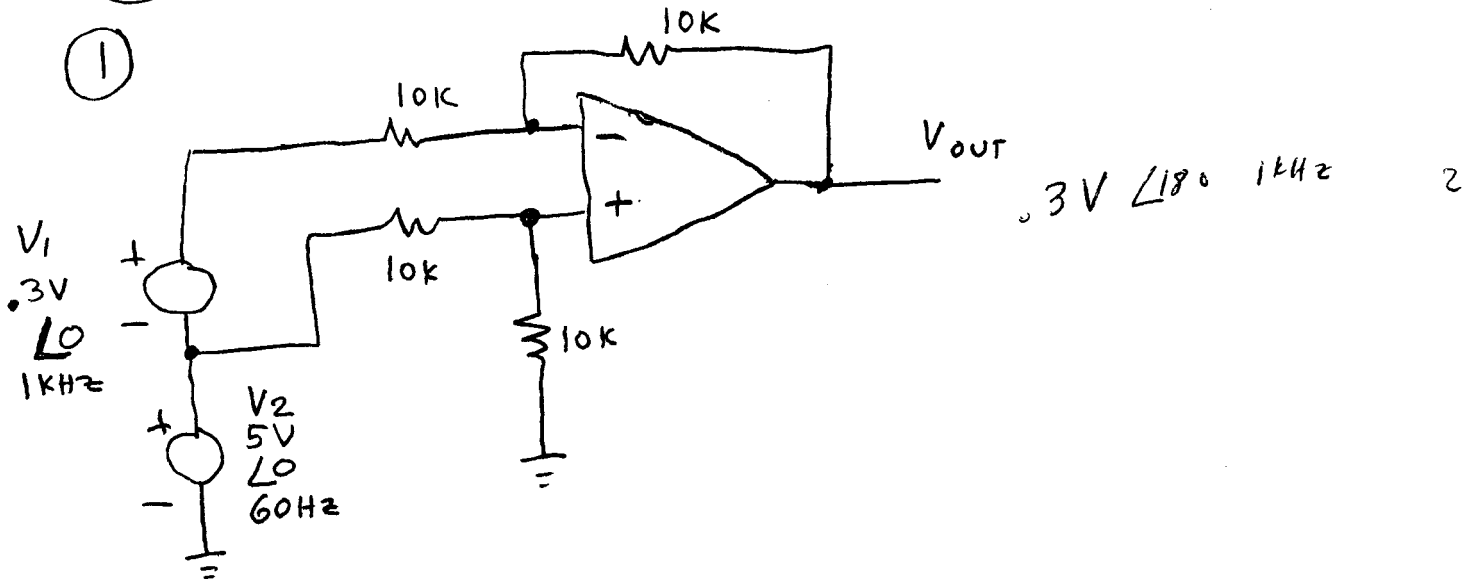


Name \_\_\_\_\_

(4C)

What is  $V_{out}$ ?

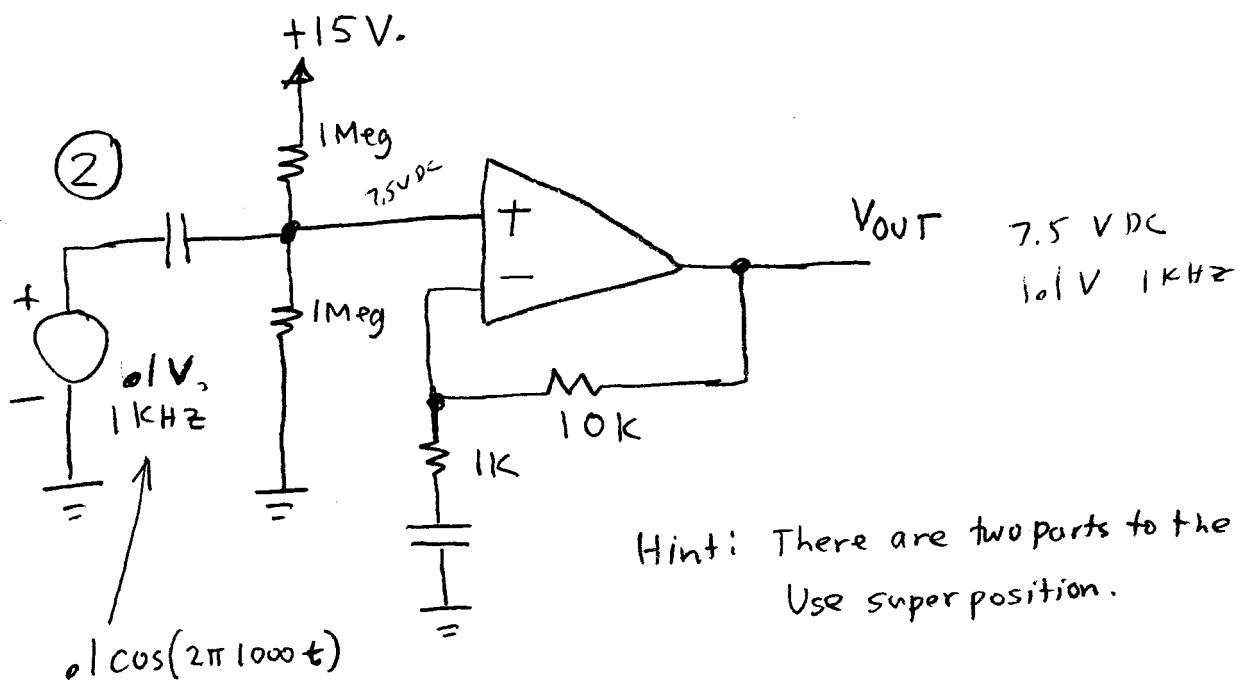
(1)



3V  $\angle 180^\circ$  1kHz

2

(2)



7.5 V DC  
1V 1kHz

2

Hint: There are two parts to the answer.  
Use superposition.

$1 \cos(2\pi 1000 t)$

③ Design a summing amplifier with  
3 inputs  $V_1, V_2, V_3$

and gain :  $\frac{V_{out}}{V_1} = -1$

$$\frac{V_{out}}{V_2} = -10$$

$$\frac{V_{out}}{V_3} = -0.1$$

Your lowest resistor value should be 1K

