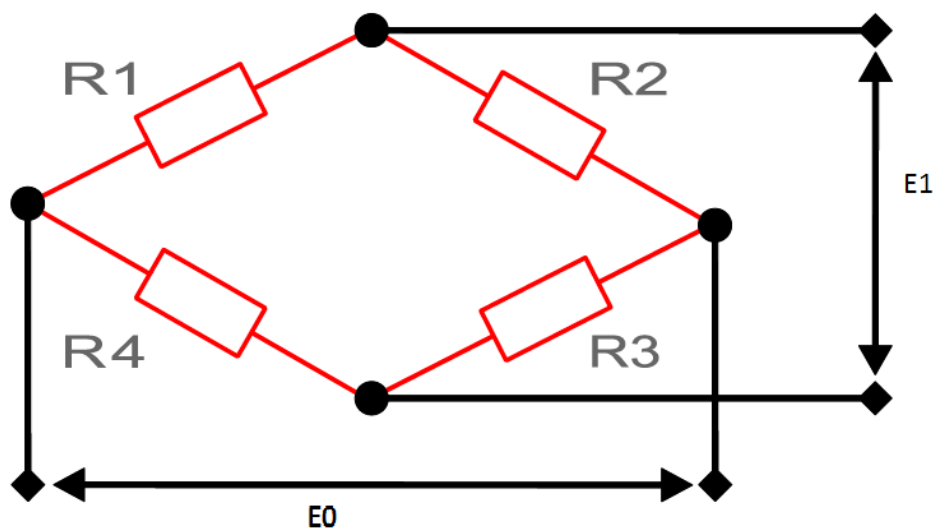


## Exercise 2

1. The signal level in a hearing aid drops 8 db. How many per cents the amplitude of the signal the decreases?
2. In the picture below is shown the measuring bridge from a blood pressure meter. During a measurement  $R_1=R_2=R_4=10k$  and  $R_3=8.7k$ . Define the voltage  $E_1$  if the voltage  $E_0$  is 12V. Design an amplifier to amplify  $E_1$  to 2 volts.



3. If in the bridge of task 3 all the resistors are 10k and the accuracy of these resistors is 5% how much voltage ( $E_1$ ) can be resulted from the resistor accuracy?