# Problem Wk.7.2.1: Parallel Resistors

This problem is intended to help you build up some intuition about resistors in parallel and should be done without a calculator. The questions below refer to the following two circuits.
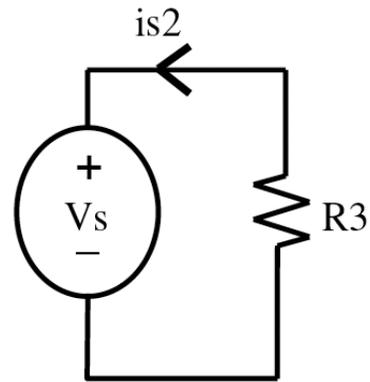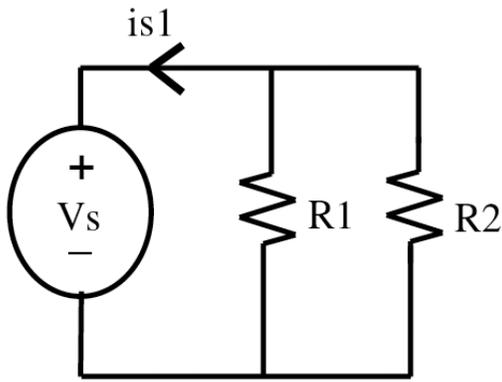
1. If $R_1 = R_2 = 100$ Ohms, for what value of R_3 will $i_{s1} = i_{s2}$?
   R_3 (enter floating point number): [   ] Ohms

2. If $R_1 = 100$ Ohms, and $R_2 = 10{,}000$ Ohms $= 10K$ Ohms, for *approximately* what value of R_3 will $i_{s1} = i_{s2}$
   R_3 (enter floating point number): [   ] Ohms

3. If $R_1 = 100$ Ohms, $R_2 = 1$ Ohms, for *approximately* what value of R_3 will $i_{s1} = i_{s2}$?
   R_3 (enter floating point number): [   ] Ohms

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