



You are assigned the task of delivering 1 volt to the 2KΩ resistor, which represents the motor that spins the CD in a car CD player. The problem is that 5V sources with an internal resistance of 1kΩ are the only ones available because that is representative of the battery connection after it has gone through other conversions not discussed here. If the voltage is too high, the CD will spin too fast and if it is too low, it will not spin fast enough. Design the circuit above to deliver the correct voltage to the motor so that it will spin at the correct speed.