

A particular circuit has a Norton equivalent having a $200\ \Omega$ output shunt resistance.

An external $100\ \Omega$ resistor is connected across the output.

The voltage at the output terminals will then be

1. Unchanged
2. Reduced by factor of half
3. Reduced by factor of one third
4. Reduced by factor of two thirds

Maximum power is transferred to an external resistive load when the external load resistance

1. Is less than the Norton shunt resistance
2. Equals the Norton shunt resistance
3. Is greater than the Norton shunt resistance