Make a design of voltage divider. You can use any values from the range 10 Ω 100 kΩ of progression E12. The voltage divider can be made from 2 to 4 components. The connection depends on your design.

Given values:

U1 = 12 V

U2 = 10.5 V

Ri = 315 Ω

Tested values:

* The output voltage error must be less than 1%.
* Ri value defines the short circuit current. The error of the current value can be up to 10%.
* Your circuit must pass the short circuit test for 5 minutes. The temperature of any resistor should be lower than 100 °C.

Make a design of voltage divider. You can use any values from the range 10 Ω 100 kΩ of progression E12. The voltage divider can be made from 2 to 4 components. The connection depends on your design.

Given values:

U1 = 12 V

U2 = 5 V

Ri = 200 Ω

Tested values:

* The output voltage error must be less than 1%.
* Ri value defines the short circuit current. The error of the current value can be up to 10%.
* Your circuit must pass the short circuit test for 5 minutes. The temperature of any resistor should be lower than 100 °C.

Make a design of voltage divider. You can use any values from the range 10 Ω 100 kΩ of progression E12. The voltage divider can be made from 2 to 4 components. The connection depends on your design.

Given values:

U1 = 12 V

U2 = 10 V

Ri = 345 Ω

Tested values:

* The output voltage error must be less than 1%.
* Ri value defines the short circuit current. The error of the current value can be up to 10%.
* Your circuit must pass the short circuit test for 5 minutes. The temperature of any resistor should be lower than 100 °C.