



WeiTec

Te Whare Wānanga o te Awakairangi

A

DC fundamentals EE3103 Student workbook 2020 for Ohms and Kirchhoffs laws with Series and parallel exercises



Student name

OHM'S LAW AND KIRCHHOFF'S ASSIGNMENT

assignment name.....

- 1) Write the 4 equations you would generally employ when solving calculations with **series resistors only** in the circuit.

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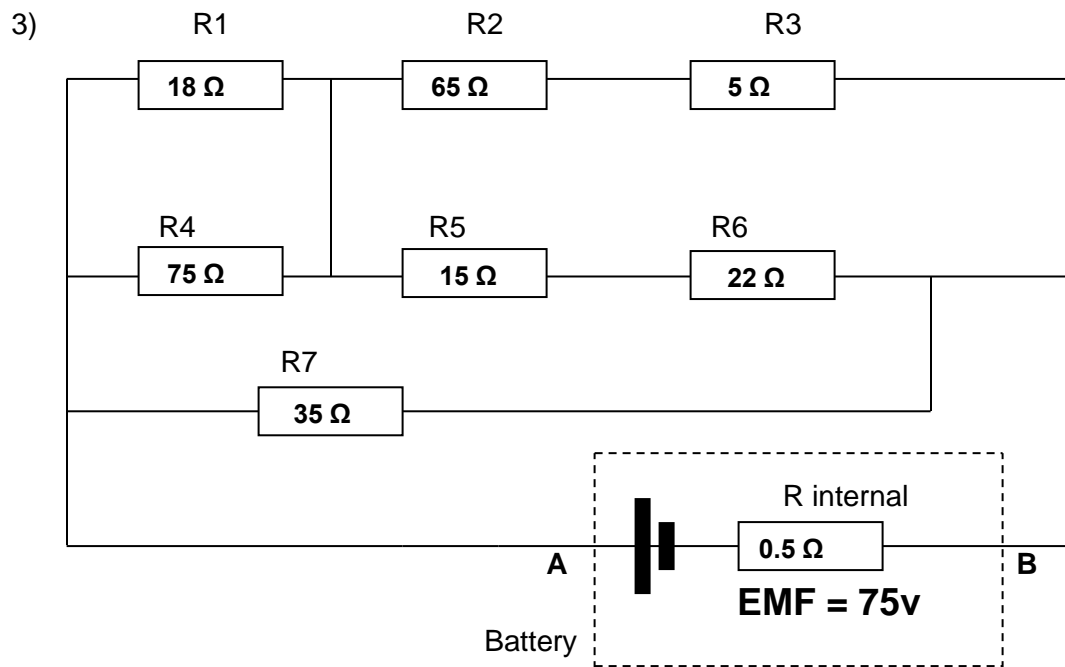
- 2) Write the 4 equations you would generally employ when solving calculations with **parallel resistors only** in the circuit.

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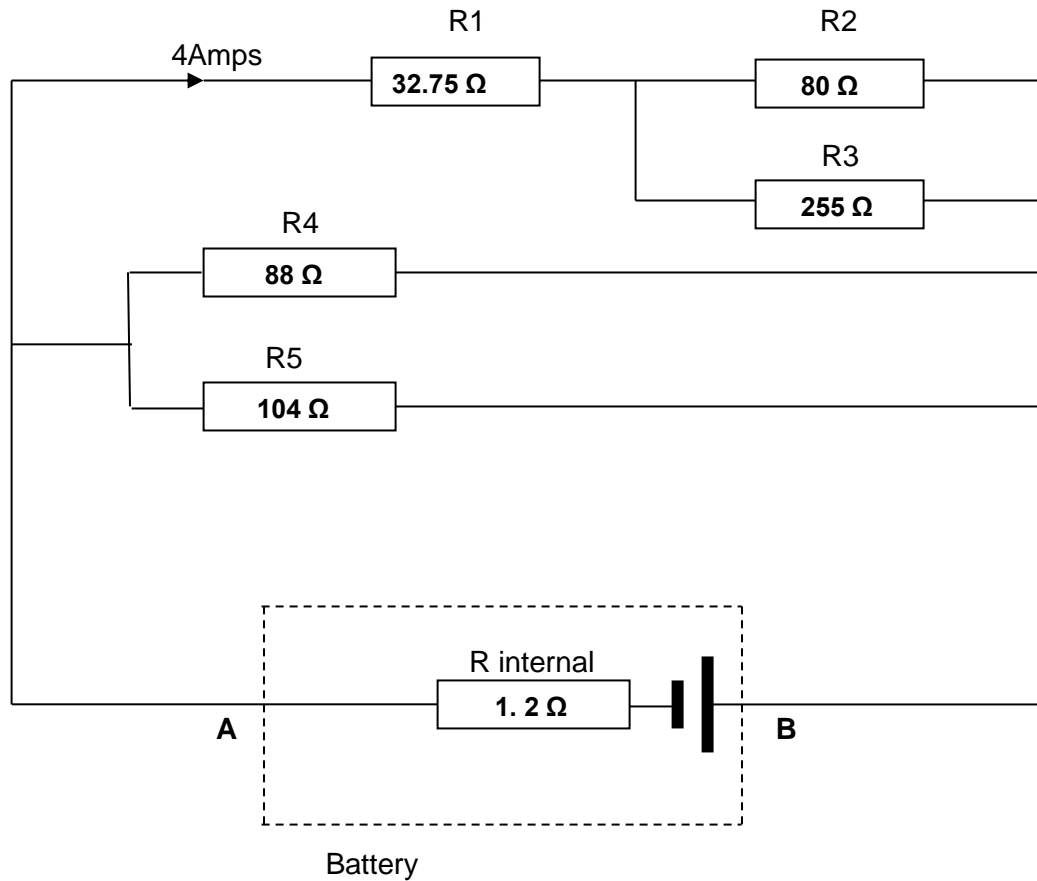
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- Calculate total resistance of the external load.
- Calculate the total current.
- Calculate the voltage at the battery terminals
- Calculate the current through R_1 , R_3 , R_4 , R_5 , and R_7 .
- Calculate the voltage across R_4 , R_6

4)



From the circuit above.

- A) Calculate the total current.
- B) What is the voltage drop across R_3 .
- C) What is the value of the battery EMF