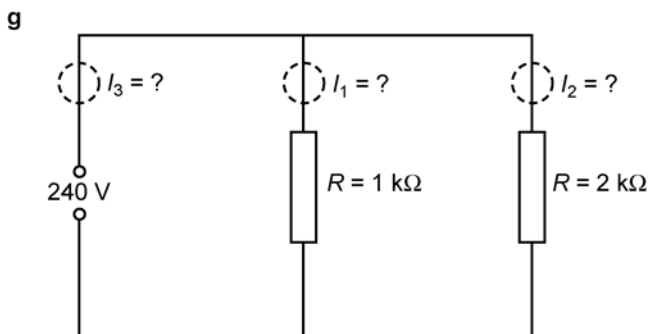
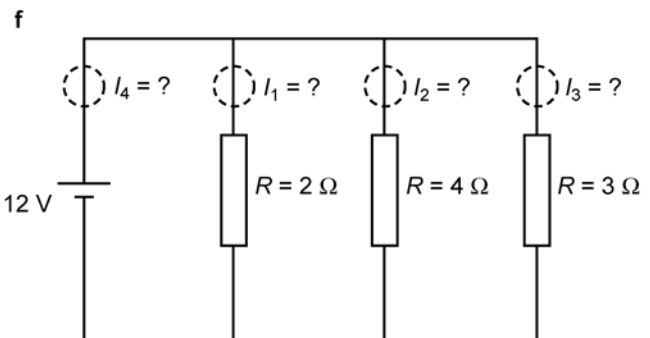
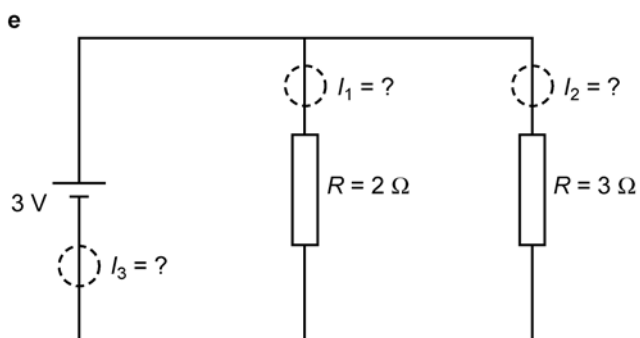
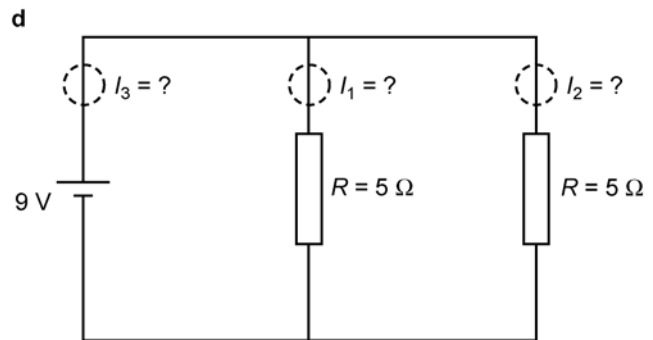
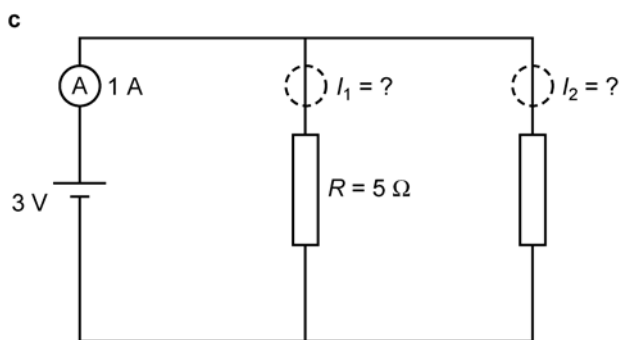
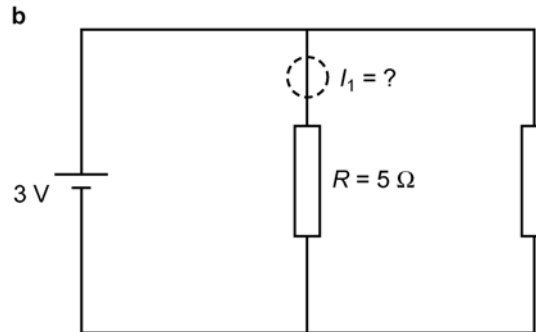
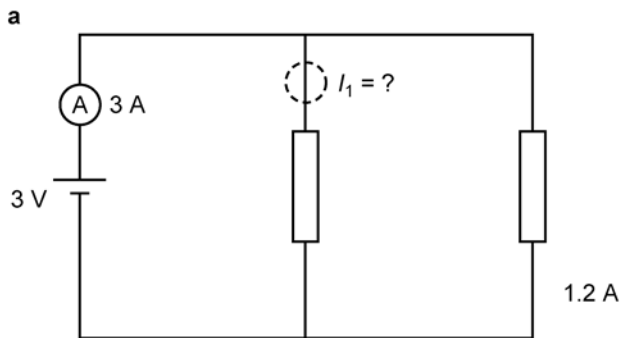


## Activity AP5.21 Calculations for parallel circuits

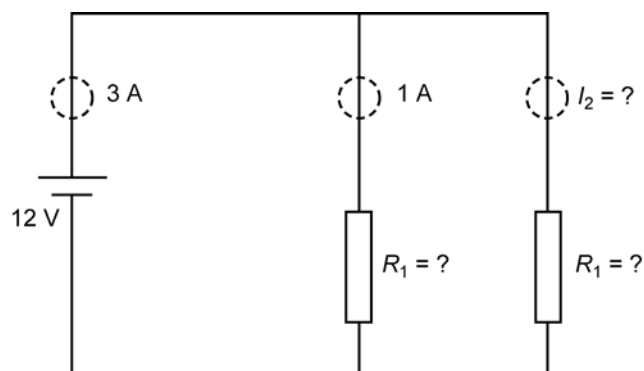
### To answer

- 1 Calculate the missing current readings on these ammeters. Write the answers on the diagrams.

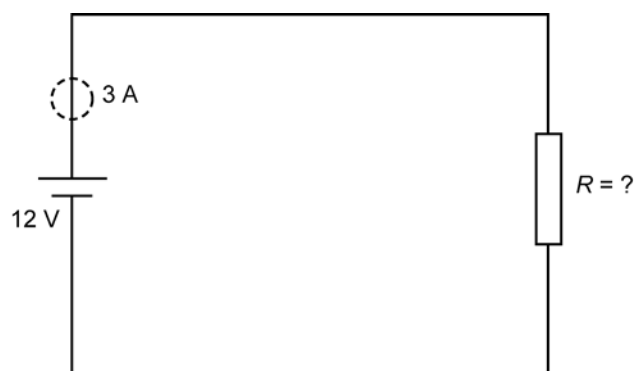


## Activity AP5.21 Calculations for parallel circuits

- 2 Work out the values of the resistors in this circuit.



- 3 These two resistors are replaced with one new resistor, which has a value chosen so that the current and voltage are unchanged.

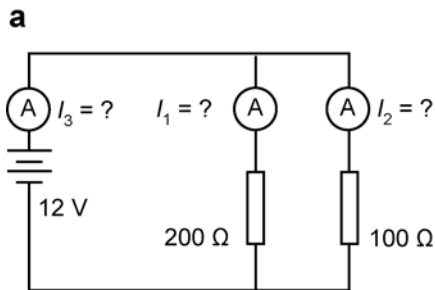


What value would the new resistance have to be?

## Activity AP5.21 Calculations for parallel circuits

### Optional

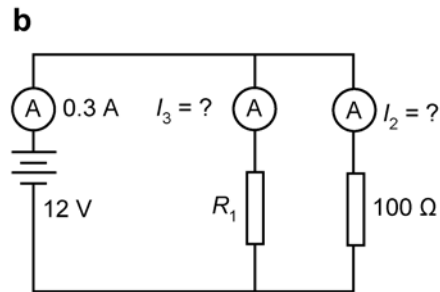
4 Work out the missing values.



$$I_1 =$$

$$I_2 =$$

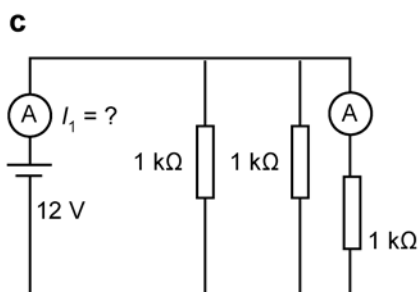
$$I_3 =$$



$$I_2 =$$

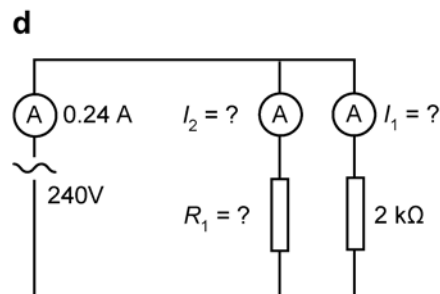
$$I_3 =$$

$$I_1 =$$



$$I_2 =$$

$$I_1 =$$

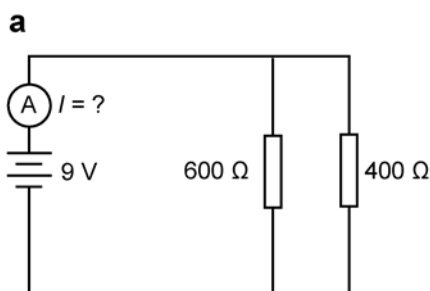


$$I_1 =$$

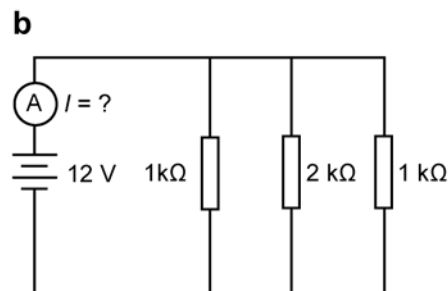
$$I_2 =$$

$$R_1 =$$

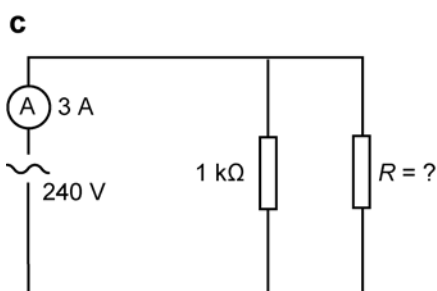
5 In the following questions you are asked for one value. You may need to calculate others to find this value. Look back at the previous examples if you are not sure what to calculate first.



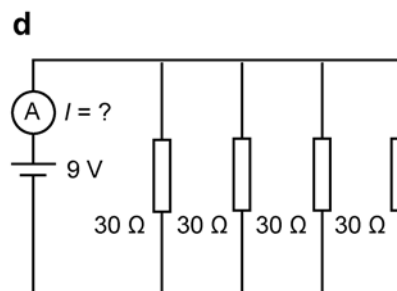
$$I =$$



$$I =$$



$$R =$$



$$I =$$