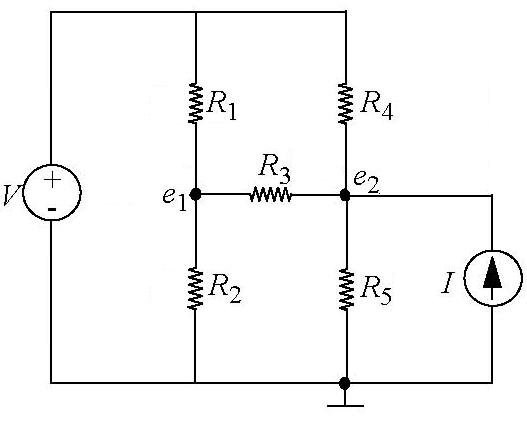
PHYS 351 Independent Study – Circuit Analysis Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
Topic: KCL, KVL, and the Node Method

1. [Watch this MIT video lecture-2](http://ocw.mit.edu/courses/electrical-engineering-and-computer-science/6-002-circuits-and-electronics-spring-2007/video-lectures/lecture-2/)  
  
2. Determine the current through each of the resistances below using the node method.  
(V = 12 volt, R1= 5 ohm, R2= 8 ohm, R3= 15 ohm, R4= 9 ohm, R5= 10 ohm, and I = 3 A)  


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| --- | --- | --- | --- | --- | --- | --- |
|  | |  | | --- | | http://edugen.wiley.com/edugen/courses/crs4957/common/art/pixel.gif | | |  |  |  | | --- | --- | --- | | |  | | --- | | http://edugen.wiley.com/edugen/courses/crs4957/common/art/pixel.gif | |  | | | |

3. Determine the current through each of the resistances below using the node method.  
(V = 6 volt, R1= 3 ohm, R2= 4 ohm, R3= 5 ohm, R4= 6 ohm, R5= 7 ohm, R6= 8 ohm, and I = 2 A)