

Massachusetts Institute of Technology
Department of Electrical Engineering and Computer Science

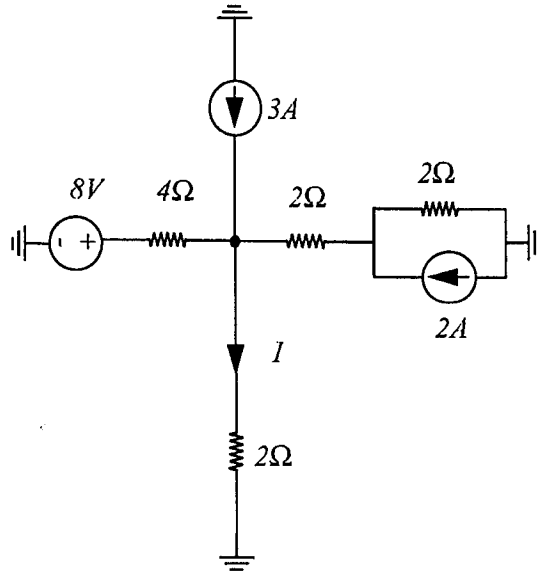
6.002 - Electronic Circuits
Spring 2000

Quiz #1
February 23, 2000
One Hour Closed Book

NOTE: Answer any 2 of the following 3 questions.

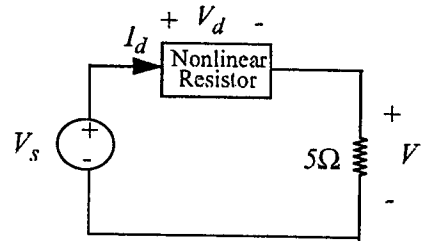
Problem #1

Find the current I in the circuit illustrated below:

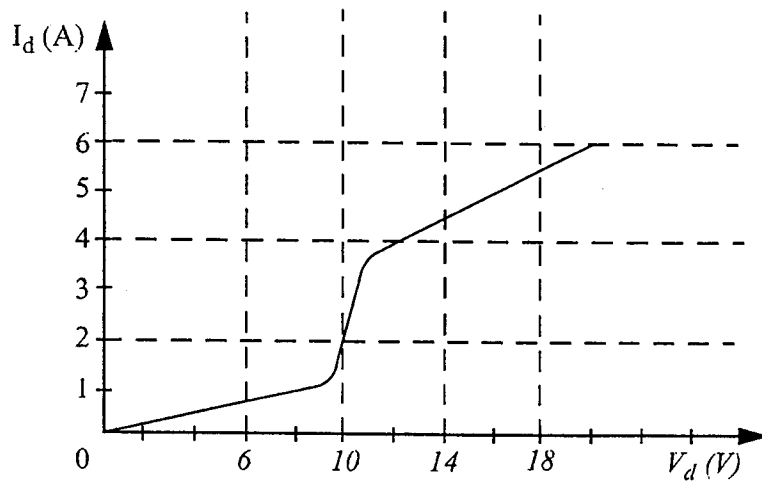


Problem #2

Find the output voltage V in the circuit illustrated below:



Assume that $V_s = 20V + 0.55V\sin(\omega t)$ and that the I_d - V_d characteristic of the nonlinear resistor is as shown below.



Problem #3

Find an analytic expression for the V - I relationship for the circuit illustrated below:

