Student's Name:

Introduction to circuit analysis

Homework 7 – Mesh Analysis

Instructions:

R1

 $3.6k\Omega$

Vs1 20V

YOU HAVE TO SHOW ALL WORK IN ORDER TO RECEIVE FULL CREDIT

R3

 $1.5k\Omega$

All answer must be in engineering notation rounded off to the hundredth

Question 1) For the following circuit, use mesh analysis to solve for the following:

R2

≤2.2kΩ

10V

Mesh Equation i₁

Mesh Equation i₂

Mesh current i₁ Mesh current i₂

30V

I_{R3}_____

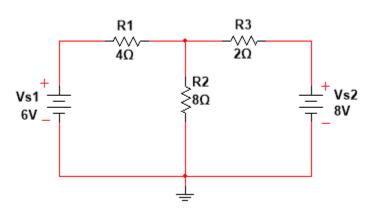
 V_{R2}

 V_{R3}

Question 2) For the following circuit, use mesh analysis to solve for the following:

Mesh Equation i₁

Mesh Equation i₂



Mesh current i₁ Mesh current i₂

 V_{R2}

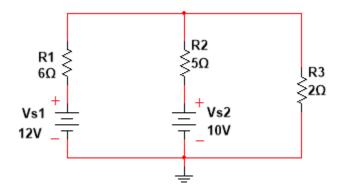
 V_{R3}

Question 3) For the following circuit, use mesh analysis to solve for the following:

Mesh Equation i₁ _____ Mesh Equation i₂ _____

Mesh current i₁

Mesh current i₂



I_{R1} _____

I_{R2} _____

 I_{R3}

 V_{Pl}

 V_{R2}

 V_{R3}