**Lab #7**

**TECH 3232**

Ver 1.5

Names:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Instructions - Please submit one worksheet per group via electronic submission with pictures embedded in the doc.

Build the circuit as shown in the schematic provided.

Take a picture of the Dip Switch, using PAINT, label the switches (A1..A3, B1..B3) and put image below:

Once the circuit is built, perform the following math using the circuit:

(binary math)

0011

+0001

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Take pictures of the 7-seg and DIP Switch (and paste them in the document). Explain how the picture relates to the math shown above.

(Dec math)

5

-3

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Take pictures of the 7-seg and DIP Switch (and paste them in the document). Explain how the picture relates to the math shown above.

(Dec math)

3

-5

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Take pictures of the 7-seg and DIP Switch (and paste them in the document). Explain how the picture relates to the math shown above.

Using the links provided on the class website, prove the 7-seg display is working correctly and explain why the circuit produces that output.