Once again, you will be expected to show all your work! Answers alone will receive no credit, even if they are correct. I am more interested in how you got the answer! I do give partial credit for problems that are partly correct. You may bring a pre-made number line to your test if you wish. You may not use a calculator.

Be sure you know what to do when you see: Simplify; Evaluate; or Solve! When you practice, mix up the problems so you also practice reading and remembering the directions.

You may be asked to graph some integers on the number line. Bring a straight-edge (small ruler) to make a nice straight number line. Watch for the word "between". For example: the integers between 3 and 8 would be 4, 5, 6, 7 but would not include 3 or 8. Remember to write the number above the line when you are graphing.

You should be able to put <, >, or = correctly between two integers. The inequality symbol points to the smaller number. (Use the number line! Smaller numbers are to the left, larger numbers are to the right.) Be sure to deal with the absolute value before inserting the symbol between the numbers.

Example:

\[
\begin{align*}
-9 & \quad |5| \\
9, & \quad 5 \\
9 & \quad > 5
\end{align*}
\]

Be able to use all the rules for "combining" (adding and subtracting), multiplying, and dividing signed numbers.

Make sure you know and USE!!!!:

When multiplying or dividing:
- like signs produce a positive answer
- different signs produce a negative answer

When combining (adding or subtracting)
- Same signs: find the sum; answer has the common sign.
- Different signs: find the difference; answer has the sign of the number with the larger absolute value.
  - or: Use the number line; start at zero, move left/right.

Order of operations:
- Work within symbols of inclusion first
- Multiply/Divide left-to-right
- Add/Subtract (Combine)

To Simplify: Use MDAS sways left-to-right. (Simple Sally)

To Solve: "Undo" MDAS: SADM (Solve: SADM)

To Evaluate: (1) Substitute and then (2) Simplify
There will be some word problems. The four-step set-up for word problems will be expected and necessary for credit:

1. Assign a variable; (this is the "let" statement!)
2. Write an equation;
3. Solve the equation;
4. Be sure to answer the question!

Here are some suggested problems to practice for your second math 85 exam:

**Solving equations**: Sup 1.7.1

**Word problems**: Sup. 1.7.2

**Combining Signed Numbers**: Sup. 1.5, 1.6

**Combining Like Terms**: Book 1.5 (p. 43) Sup 2.1 (Including Evaluate problems)

**Multiplication and division of signed numbers**: Book 1.7 Sup 1.7a and 1.7b.

Remember, division by zero is undefined.

\[
\frac{\text{AnyNumber}}{0} \text{ is undefined} \quad \frac{0}{\text{AnyNumber}} = 0
\]

Read and do the problems in the "Test Taking Guidelines" in Sup. 1.7.4a and 1.7.4b. Good Practice!

**Other Review Problems:**


Book (Ch 1 Test, pg. 78) Choose from all except 31, 34, and 36.