Math 009 Quiz 1

Professor: Professor Tameka Brown

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Instructions**:

* The quiz is worth 50 points. There are 10 problems, each worth 5 points. Your score on the quiz will be converted to a percentage and posted in your assignment folder with comments.
* This quiz allows **open book** and **open notes**, and you may take as long as you like on it provided that you submit the quiz no later than the due date posted in our course schedule of the syllabus. You may refer to your textbook, notes, and online classroom materials, **but you may not consult anyone**.
* You should show all of your work to receive full credit. If you do not show work, you may earn only partial or no credit.
* Please type your work in your copy of the quiz, or if you prefer, create a document containing your work. Scanned work is also acceptable. Be sure to include your name in the document. Review instructions for submitting your quiz in the Quizzes Module.
* If you have any questions, please contact me by e-mail Tameka.Brown@faculty.umuc.edu

**At the end of your quiz you must include the following dated statement with your name typed in lieu of a signature.  Without this signed statement you will receive a zero.**

I have completed this quiz myself, working independently and not consulting anyone except the instructor. I have neither given nor received help on this quiz.

Name:                                                           Date:

***Please remember to show ALL of your work on every problem. Read the basic rules for showing work below BEFORE you start working on the quiz.***

**a) Each step should show the complete expression or equation rather than a piece of it.**

**b) Each new step should follow logically from the previous step, following rules of algebra.**

**c) Each new step should be beneath the previous step.**

**d) The equal sign, =, should only connect equal numbers or expressions.**

**Our textbook is full of good models of work shown correctly. Take a look, for instance, at PA Section 2.5 Examples 2 – 8 or PA Section 2.6 Examples 2 – 11.**

**If you have questions about showing work, please ask.**

***Did you read the rules for showing work on page 1 of the quiz? If not, please go back to page 1 now and read them. If you do not show work correctly, you will not earn full credit.***

1) Simplify the following expression:

 $1+6(4^{2}-(5)^{2})$

2) Simplify the following expression:

 $\frac{| 9 -27|}{4\left(-1\right)+13}$

3) Simplify the expression:

 $\frac{3\left(-4+9\right)}{\left(-6\right)\left(-1\right)- (-1)^{2}}$

4) Simplify the expression:

 $\frac{\left(-10\right)^{2} ÷5∙\left(-2\right)}{4\left[3-5\right]}$

5) Evaluate the expressions below for *x* = -2 and *y* = -3:

1. $3x^{2}+y^{2}$

b) $x^{2}-3y^{2}$

6) Solve the equation below and show the check of your answer.

 $z+11=-30$

7) Solve the equation below and show the check of your answer.

 $4t+4=-52$

8) Solve the equation below and show the check of your answer.

 $\frac{x}{8}=7$

9) The top of a mountain has an altitude of 18,567 feet above sea level and the bottom of a valley nearby is at 803 feet below sea level. Answer each of the following questions, including units with all answers.

1. Find the difference between these two elevations.
2. Round your answer from part (a) to the nearest 10 feet.
3. Round your answer from part (a) to the nearest 100 feet.
4. Round your answer from part (a) to the nearest 1000 feet.
5. Round your answer from part (a) to the nearest 10,000 feet.

10) Jackson’s scores on the first four algebra quizzes are 90, 77, 89, and 71. What score must he earn on the fifth quiz to earn an average quiz score of 85? Please set up and solve this problem following the steps below:

1. Define the unknown quantity in terms of one variable.
2. Translate the question into an equation.
3. Solve the equation, showing all work.
4. Write a complete answer to the question asked.

***End of quiz: please do not forget to write and sign (or type) the required statement explained in the box on page 1 of the quiz.***