



Intermediate Algebra Quiz 5 Solution Summer 2010

NAME: _____ Score _____/10

Please **print** your name

1. T F The graph of an equation or inequality in one variable is a subset of the real number line.
2. T F A linear equation in one variable will have no solutions, one solution, or have all real numbers as solutions.
3. T F The process to solve a linear equation in one variable is to generate a sequence of equations each equivalent to the previous equation until a simplest equation is obtained.
4. T F A linear inequality in one variable x is an inequality which can be written in the form $ax + b < 0$
5. A compact compound inequality is a compound inequality which can be written in the form _____.
6. A compound inequality is two inequalities joined by either the conjunction _____ or the conjunction _____.
7. Write the compound compact inequality which is equivalent to $|3x - 8| < 9$. **(I don't want you to solve it.)**
8. Which of the following can be the graph of an inequality of the form $|ax + b| < k$ where a , b and k are real numbers and k is positive. Circle the letter corresponding to the correct response.

- a. 
- b. 
- c. 

9. Solve the inequality $-3x + 7 > 13$. Write the solution set in interval notation. **Show your work.**

10. Solve the formula $V = \frac{1}{3}\pi r^2 h$ for h . **Show your work.**