College Algebra Quiz 1a Solution

Name _____ Score_____

Please Print Clearly

Circle the correct response

1. T **F** If both sides of an equation are multiplied by an expression, the resulting equation is equivalent to the original equation

2. **T** F If an algebraic expression is added to both sides of an equation, the resulting equation is equivalent to the original equation.

3. T **F** If both sides of an equation are squared, the resulting equation is equivalent to the original equation.

4. T **F** If two equations have the same solution set they are equal equations.

Fill in the blanks to correctly complete the following statements.

5. The **graph** of an equation consists of all the points, and only those points, which satisfy the equation.

5. Two equations are **equivalent** if they have the same solution set.

6. A linear equation in one variable is an equation that can be written in the form **$ax + b = 0$** where a and b are real numbers with a not zero.

7. To find the x-intercepts of the graph of an equation, set **y** equal to 0 and solve for **x**

8. The volume of a right circular cylinder with radius r and height h is given by $V = \mathbf{\pi r^2 h}$

9. Describe the graph of the equation $x^2 + y^2 = 49$

   The graph of the equation $x^2 + y^2 = 49$ is the circle with center at the origin and radius 7.

10. Write the the equation of the circle with center at (-1, 3) and radius 5. There is no need to do any multiplications.

    $$\mathbf{(x + 1)^2 + (y - 3)^2 = 5^2}$$