

NAME: \_\_\_\_\_ Score \_\_\_\_\_/10

Please **print** your name

1. T F The interval  $[4, 8]$  contains both 4 and 8.
2. T F  $(4, \infty]$  is acceptable interval notation.
3. T F Every equation has a solution.
4. T F Every conditional equation has a solution.
5. T F Every integer is a rational number.
6. T F If both sides of an equation are multiplied by the same expression, the resulting equation is equivalent to the original equation.
7. T F Two equations are equivalent if they have the same solution sets.
8. The collection of all solutions of an equation is called the \_\_\_\_\_ of the equation.
9. If  $a$  and  $b$  are real numbers, then one and only one of the following is true:
  - i. \_\_\_\_\_
  - ii. \_\_\_\_\_
  - iii. \_\_\_\_\_
10. Calculate the midpoint of the line segment joining  $(3, 5)$  and  $(1, 7)$ . Remember: If you intend to use a formula state it first.