

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

Please **print** your name

1. **T** **F** The interval  $(3, 4]$  contains the number 4.
2. **T** **F**  $(4, 3)$  is acceptable interval notation.
3. **T** **F** Every equation is a conditional equation.
4. **T** **F** Every real number is a rational number.
5. **T** **F** Every irrational number is a real number.
6. If  $a$ ,  $b$ , and  $c$  are real numbers such that  $a = b$  and  $b = c$ , then  **$a = c$** .
7. If  $a$  and  $b$  are real numbers and  $ab = 0$ , then  **$a = 0$**  or  **$b = 0$** .
8. The **graph** of an equation consists of all the points, and only those points, whose coordinates are solutions of the equation.
9. Two equations are **equivalent** if they have the same solution sets.
10. Calculate the distance between  $(3, 6)$  and  $(2, 5)$ . Remember: If you are going to use a formula, state it first.

Use the formula for the distance between two points  $d = \sqrt{(x_1 - x_2)^2 + (y_1 - y_2)^2}$  to obtain

$$d = \sqrt{(3 - 2)^2 + (6 - 5)^2} = \sqrt{(1)^2 + (1)^2} = \sqrt{2}$$