Name_____Date_____Period_____

12.4 – Quadratic Equations with Complex Solutions

Find the number and type of solutions for the following quadratic equations using the discriminant. Then, solve each equation using the quadratic formula.

1. $x^2 - 4x + 3 = 0$ $a =$ _____ $b =$ _____ $c =$ _____

Number & Type of Solutions: _____ Solution: _____

2. $x^2 - 2x + 2 = 0$ $a =$ _____ $b =$ _____ $c =$ _____

Number & Type of Solutions: _____ Solution: _____

3. $5x^2 - 4x + 8 = 0$ $a =$ _____ $b =$ _____ $c =$ _____

Number & Type of Solutions: _____ Solution: _____

4. $x^2 + 10x + 25 = 0$ $a =$ _____ $b =$ _____ $c =$ _____

Number & Type of Solutions: _____ Solution: _____

5. $5x^2 + 2x + 1 = 0$ $a =$ _____ $b =$ _____ $c =$ _____

Number & Type of Solutions: _____ Solution: _____

6. $5x^2 - 6x + 5 = 0$ $a =$ _____ $b =$ _____ $c =$ _____

Number & Type of Solutions: _____ Solution: _____