**Day 9 – Solving by Quadratic Formula Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Practice Assignment**

Directions: Find the discriminant and tell the number of solutions. Then solve each of the following equations using the Quadratic Formula.

**x = **

Discriminant:

# of Solutions:

X =

Discriminant:

# of Solutions:

X =

1. x2 + 4x - 2 = 0 2. 4x2 – 8x + 3 = 0

Discriminant:

# of Solutions:

X =

Discriminant:

# of Solutions:

X =

3. 5x2 – 10x + 18 = 13 4. 6x2 = -4x – 10

Discriminant:

# of Solutions:

X =

5. 2x2 – 7x - 13 = -10 6. 8x2 + 4x + 16 = - x2

Discriminant:

# of Solutions:

X =

**Error Analysis:**

Describe and correct the error Jaya made when attempting to solve using the quadratic formula.

Problem: 7x + 2x2 – 4= 3

*Jaya’s Process: Correct Process:*

7x + 2x2 – 4= 3

7x + 2x2 – 7= 0

$$\frac{-2 \pm \sqrt{2^{2}-4(7)(-7)}}{2(7)}$$

$$\frac{-2 \pm \sqrt{200}}{14}$$

x = $\frac{-2 \pm 10\sqrt{2}}{14}$

x = $\frac{-1 + 5\sqrt{2}}{7}$ and $\frac{-1 – 5\sqrt{2}}{7}$

**Decision Making:**

I have a non factorable trinomial where a is 1 and b is odd, which method am I going to use?

I have a factorable trinomial where a is NOT 1 and b is odd, which method am I going to use?

I have a non factorable trinomial where a is 1 and b is even, which method am I going to use?

I have a binomial squared and its equal to some number, which method am I going to use?