**HW #8: *The Quadratic Formula and the Discriminant***

**Complete parts a**-**b for each quadratic equation.**

 **a. Find the value of the discriminant.**

 **b. Describe the number and type of roots.**

 **1.** $x^{2}$ – 8*x* + 16 = 0 **2.** 3$x^{2}$ – 2*x* = 0

 **3.** $x^{2}$ + 49 = 0 **4**. 5$x^{2}$ – *x* – 1 = 0

**Solve each equation by using the Quadratic Formula.**

 **13.** $x^{2}$ – 64 = 0 **14.** $x^{2}$ – 30 = 0

 **15.** $x^{2}$ – *x* = 30 **20.** 3$x^{2}$ + 36 = 0

 **17.** $x^{2}$ – 4*x* – 11 = 0 **18.** $x^{2}$ – 8*x* – 17 = 0