Math 134 Spring 2018
Krystin Manguba-Glover
Classwork 9 Name: _____

Work on as many problems as you can together with your group members. Towards the end of lecture your group will be asked to present a problem correctly to receive classwork points.

1. Solve the following equations by factoring.
   (a) $x^2 = 2x + 15$
   (b) $6x^2 + 5x - 6 = 0$
   (c) $x^2 + 11x + 24 = 0$
   (d) $x^2 + 4x + 3 = 0$
   (e) $2x^2 - 5x = 3$
2. Solve the following equations by using the square root property.
   (a) $4x^2 + 3 = 19$
   (b) $2x^2 + 7 = 207$
   (c) $x^2 - 36 = 0$
   (d) $4x^2 + 2 = 258$
   (e) $9x^2 - 49 = 0$
3. Solve the following quadratic equations by completing the square.
   (a) $x^2 + 4x = -3$
   (b) $x^2 + 18x = -56$
   (c) $x^2 + 8x = 33$
   (d) $x^2 - 2x = 5$
   (e) $x^2 - 6x - 4 = 0$
4. Solve the following equations using the quadratic formula.
   (a) $x^2 + 11x + 30 = 0$
   (b) $x^2 + 11x + 4 = 0$
   (c) $2x^2 - 3x - 1 = 0$
   (d) $x^2 - 8x + 52 = 0$
   (e) $x^2 - 10x + 34 = 0$
5. Compute the discriminant and determine the number and type of solutions of the given equation.
   (a) $8x^2 - 10x + 4$
   (b) $5x^2 + 3x - 1$
   (c) $x^2 + 7x + 5$
   (d) $-x^2 + 2x - 1$
   (e) $x^2 - 2x - 7$