

Full credit will only be awarded for all work shown in a neat and organized manner.

1. Solve the following system by graphing. Make sure to graph **at least 5 points** for all parabolas. Give answer(s) to 1 decimal place. [Answer with points: (x, y)]



Graphing solution _____

2. Solve the following system algebraically. Give answer(s) rounded to 2 decimal places. [Answer with points: (x, y)]

$$y = -x^2 + 3x + 4$$
 $y = 3(x + 1)^2 - 4$

3. Draw a picture to show each of the different possible number of solutions to the system: $y = ax^2 + bx + c \qquad y = dx + e$