$x=\frac{-b \pm \sqrt{b^{2}-4 a c}}{2 a} \quad h=-\frac{b}{2 a}$
Name:
Block: $\qquad$

## Pre-Calculus 11: Solving Systems Quiz \#1

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

$$
y=-x^{2}+3 x+4 \quad y=3(x+1)^{2}-4
$$

3. Draw a picture to show each of the different possible number of solutions to the system:

$$
y=a x^{2}+b x+c \quad y=d x+e
$$

