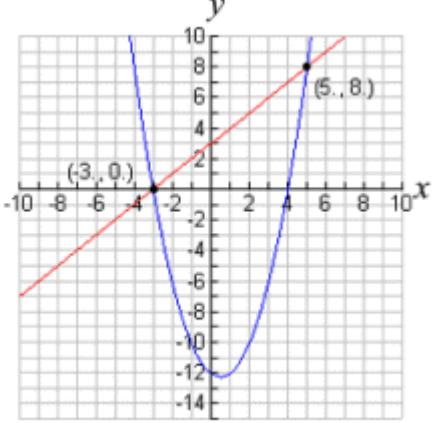
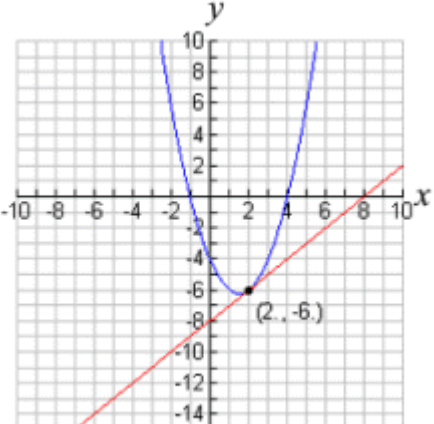
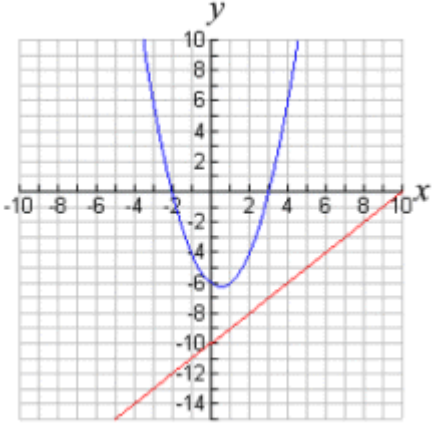


Linear Quadratic Systems

Name _____

Linear-quadratic systems can result in three graphical situations. Examine each of the graphs carefully. For each graph, write equations to represent both the parabola and the straight line shown. Solve each system algebraically showing that the graphical answer and the algebraic answer match.

Graph	Equations and Solution
 <p>A coordinate plane with x and y axes ranging from -10 to 10. A blue parabola opens upwards with its vertex at (2, -12). A red line passes through the points (-3, 0) and (5, 8). The two lines intersect at (-3, 0) and (5, 8), which are marked with dots and labeled.</p>	<p>The equations will intersect in two locations. Two real solutions.</p>
 <p>A coordinate plane with x and y axes ranging from -10 to 10. A blue parabola opens upwards with its vertex at (2, -6). A red line passes through the points (0, -6) and (8, 0). The parabola and the line intersect at (2, -6), which is marked with a dot and labeled.</p>	<p>The equations will intersect in one location. One real solution.</p>
 <p>A coordinate plane with x and y axes ranging from -10 to 10. A blue parabola opens upwards with its vertex at (2, -6). A red line passes through the points (0, -6) and (8, 0). The parabola and the line do not intersect.</p>	<p>The equations will not intersect. No real solutions.</p>