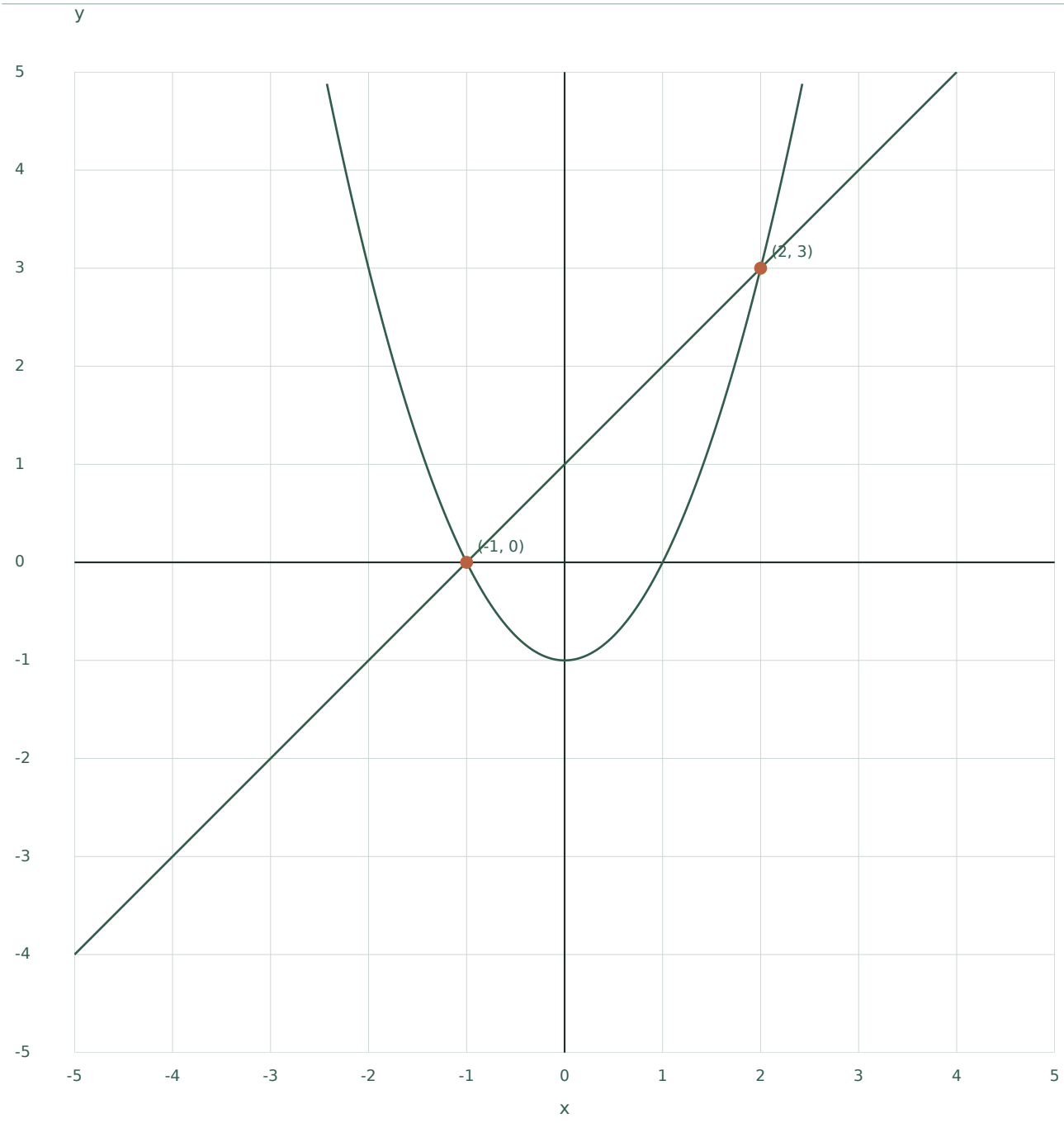
Graphing Linear-Quadratic Systems: Find Intersection Points

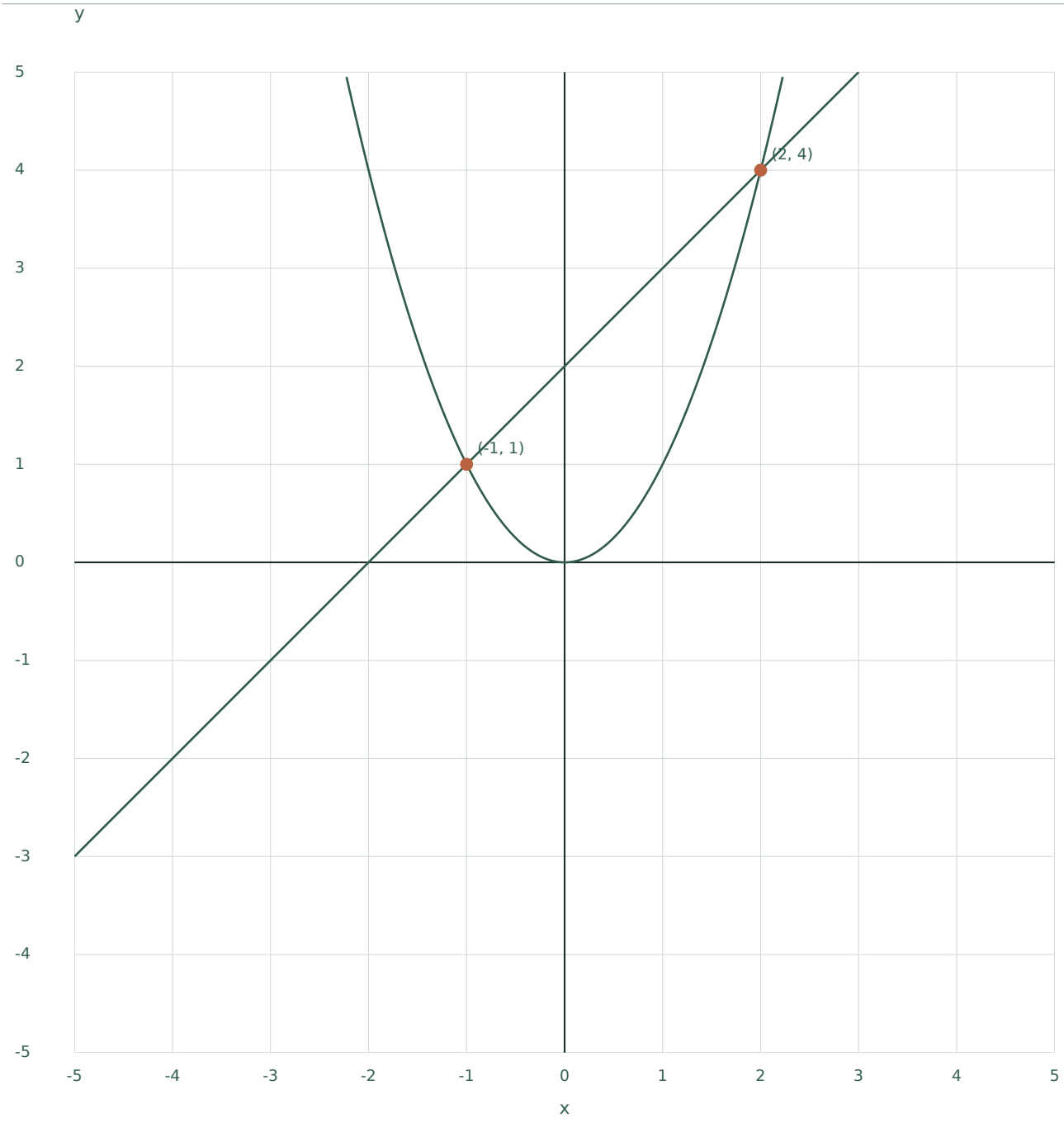
Worked Example: y = x + 1 and y = x squared - 1



Worked example graph; both curves and both intersection points shown.

Graphing Linear-Quadratic Systems: Find Intersection Points

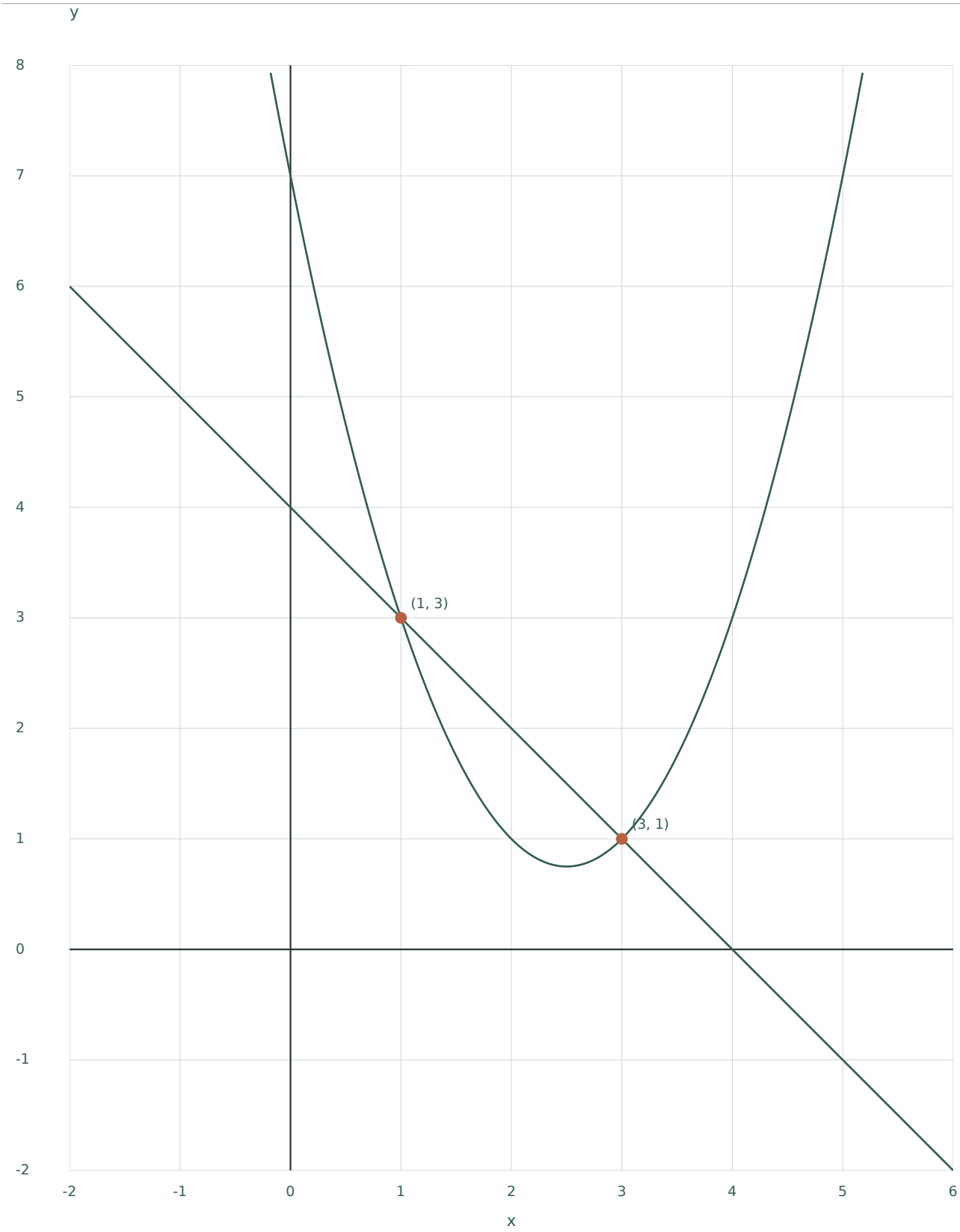
Exercise 1: y = x + 2 and y = x squared



Reference graph for Exercise 1.

Graphing Linear-Quadratic Systems: Find Intersection Points

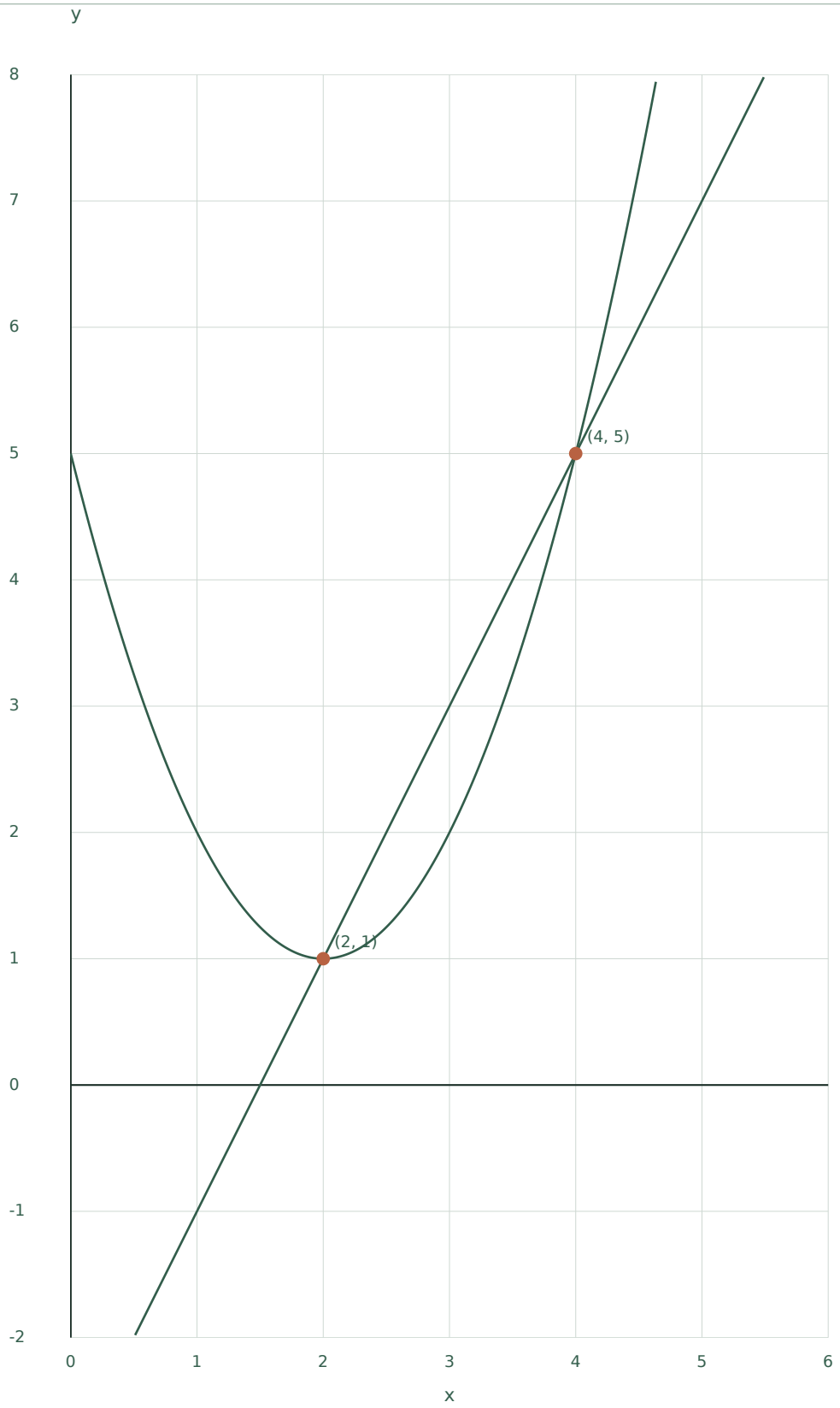
Exercise 2: y = -x + 4 and y = x squared - 5x + 7



Reference graph for Exercise 2.

Graphing Linear-Quadratic Systems: Find Intersection Points

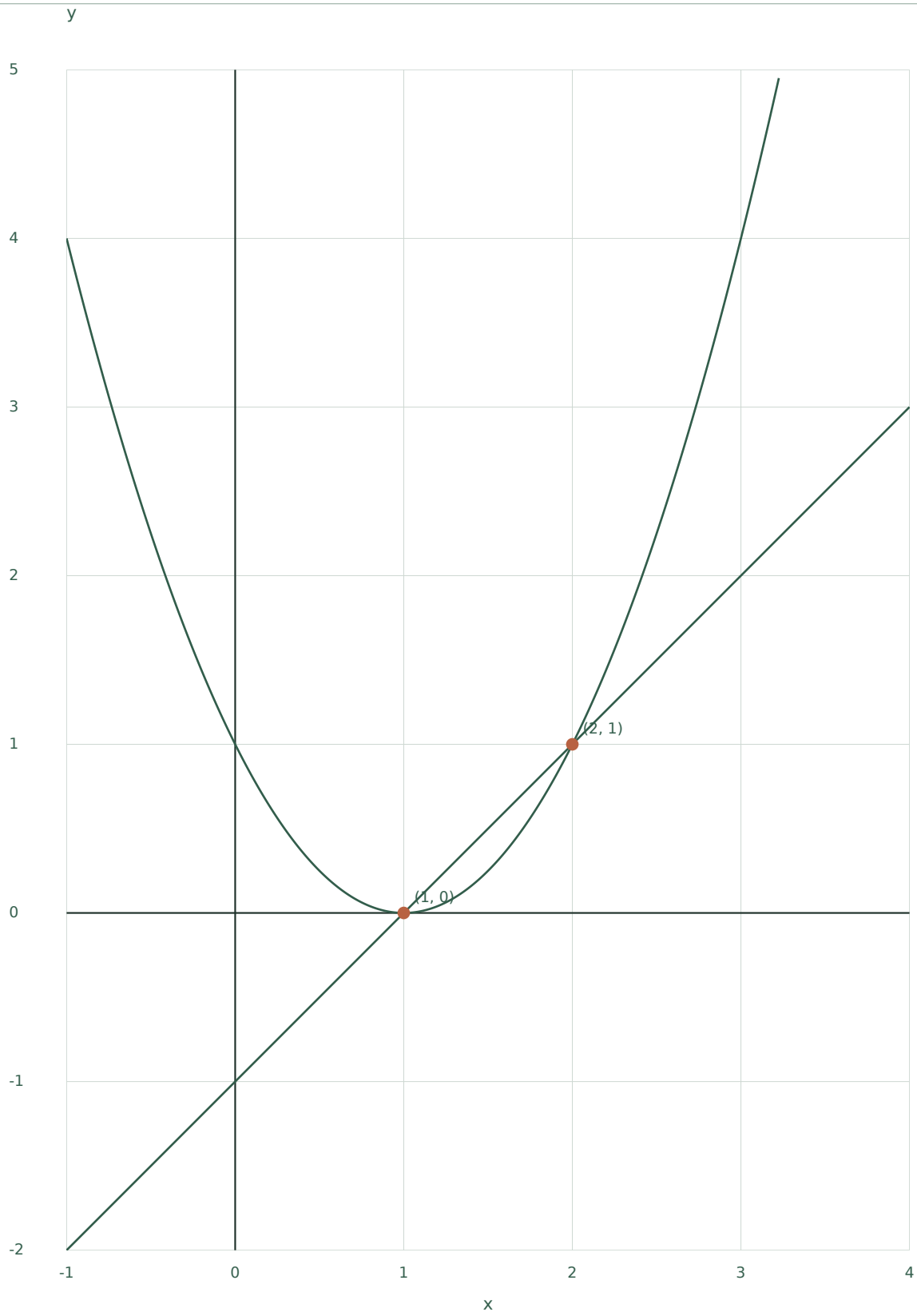
Exercise 3: y = 2x - 3 and y = x squared - 4x + 5



Reference graph for Exercise 3.

Graphing Linear-Quadratic Systems: Find Intersection Points

Exercise 4: y = x - 1 and y = x squared - 2x + 1



Reference graph for Exercise 4.

Graphing Linear-Quadratic Systems: Find Intersection Points

Grading Rubric

Rubric key for the worksheet and answer key.

1. Axes are labeled and tick spacing is equal or clearly stated.
2. The line is drawn through two correctly computed points.
3. The parabola uses at least five points around the vertex and is drawn as a smooth curve.
4. All intersection points are marked and written as ordered pairs (x, y).
5. Each intersection point is verified by substitution into both equations.
6. The number of solutions (two, one, or none) is stated consistently with the graph.