

## Math 3 Advanced

## KEY

Solve a nonlinear system of equations.

1.  $(1, 1), (2, 4)$

2.  $(3, 9), (-1, 1)$

3.  $(-2, -6), (2, -2)$

4.  $(-2, 5), (1, 2)$

5.  $(5, 13), (-3, -3)$

6.  $(-2, 8), \left(\frac{11}{4}, \frac{89}{4}\right)$

7.  $\left(\frac{7-3\sqrt{5}}{2}, 3-6\sqrt{5}\right), \left(\frac{7+3\sqrt{5}}{2}, 3+6\sqrt{5}\right)$

8.  $\left(\frac{2-\sqrt{112}}{6}, \frac{17-\sqrt{112}}{3}\right), \left(\frac{2+\sqrt{112}}{6}, \frac{17+\sqrt{112}}{3}\right)$