

## Homework: Systems of Nonlinear Equations in Two Variables

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In Problems 1-7, solve each system.

1. $3x + y = 7$ $y = x^2 - 3$	2. $y = 4x^2 - 4x + 5$ $y = -2x^2 + 3x + 8$
3. $xy = 4$ $5x + y = 9$	4. $xy = 5$ $x^2 + y^2 = 26$
5. $(x - 2)^2 + (y + 3)^2 = 36$ $x + y = 5$	6. $x^2 + 3y^2 = 7$ $2x^2 - y^2 = 7$
7. $(x - 2)^2 + y^2 = 2$ $x^2 + y^2 = 10$	