

Precalculus

8-01 Nonlinear and Linear Systems

System of Equations

- Several equations with the _____ solution

Substitution

1. _____ one equation for a variable
2. _____ this expression into the other equation
3. _____ the new equation
4. _____ the solution back into the 1st equation and solve
5. _____ your answers!

Solve $\begin{cases} -2x + y = 5 \\ x^2 + 3x - y = 1 \end{cases}$

Graphical Method

- _____ both equations on _____ coordinate plane
- The points of _____ are the solutions.

Solve graphically

$$\begin{cases} x^2 - y = 5 \\ -x + y = -3 \end{cases}$$

