## SECTION 3.5: NONLINEAR SYSTEMS

## Homework:

## Learning Targets:

3d. Understanding of how to find solutions to nonlinear systems of equations.

Nonlinear Systems:
two or more $\qquad$ . You can solve by
$\qquad$ and find the $\qquad$ . You can also
use $\qquad$ or $\qquad$

## Find intersections on a calculator

1. Plug each equation into $\mathrm{Y}=$
2. Find the intersection
a. $2^{\text {nd }}$ TRACE
b. \#5: Intersection
c. Move your curser to the intersection and hit enter until "Intersection" appears
d. Do the same process for the $2^{\text {nd }}$ intersection (if there is one)

Solve by graphing and substitution.

$$
\text { 1. } \begin{aligned}
y & =x+6 \\
y & =\frac{1}{2}(x+6)^{2}
\end{aligned}
$$


2. $y=(x+2)^{2}-3$
$y=-3$


