## Systems of Nonlinear Equations in Two Variables

Need to solve for one variable using elimination or substitution method.

Must check answers!

$$x-y=-1$$

$$y = x^2 + 1$$

$$2x + y = 4$$

$$(x+1)^2 + (y-2)^2 = 4$$

$$x^2 - 4y^2 = -7$$

$$3x^2 + y^2 = 31$$

$$x^{2} + y^{2} = 5$$
  
 $x^{2} + (y - 8)^{2} = 41$