Solve each system of equations using the substitution method. If the system has no solution, write no solution. If a system has infinitely many solutions, write infinitely many solutions.

2. 
$$x = 4y + 2$$
  
  $2x - 3y = 9$ 

3. 
$$y = 2x$$
  
 $3x + y = 12$ 

4. 
$$3x + y = 5$$
  
 $4x + 2y = 20$ 

$$5. \quad 4x + 5 = y$$
$$4x - y = 8$$

6. 
$$y = 3x - 7 + x$$
  
 $7 = 4x - y$