Systems of Nonlinear Equations in Two Variables

1. Solve each system by the substitution method (similar to p.524 #4)

$$y = x^2 - 5x + 2$$
$$4x - y = 12$$

2. Solve each system by the substitution method (similar to p.524 #6)

$$y = x^2 - 3x + 7$$
$$y = x^2 + x + 3$$

3. Solve each system by the substitution method (similar to p.524 #8)

$$x^2 + y^2 = 26$$
$$7x - y = 2$$

4. Solve each system by the substitution method (similar to p.524 #14)

$$x^2 + y^2 = 5$$
$$xy = 2$$

5. Solve each system by the addition method (similar to p.524 #20)

$$x^2 - y^2 = 12$$
$$x^2 + y^2 = 20$$

6. Solve each system by the addition method
(similar to p.524 #22)

$$3x^2 - 5y^2 = -17$$
$$2x^2 + 3y^2 = 14$$