

## Solving Systems of Equations

**Question 1.** Solve the following systems of equations by graphing.

a)  $2x + 3y = 0$   
 $3x - y = 0$

b)  $x - y = 0$   
 $2x + 3y = 5$

c)  $x + 4y = 7$   
 $2x - 3y = -8$

d)  $3x + 5y = -3$   
 $-2x + 6y = 2$

e)  $-x - y = 0$   
 $3x + y = 2$

**Question 2.** Solve the following systems of equations by substitution.

a)  $x + y = 7$   
 $x - y = -3$

b)  $-10x - 5y = 0$   
 $-2x + y = 0$

c)  $2x - 3y = 9$   
 $-x + 2y = -5$

d)  $2x + 3y = -10$   
 $x - 5y = 8$

e)  $2x - y = 2$   
 $10x + 5y = 10$

**Question 3.** Solve the following systems of equations by elimination.

a)  $x - y = 0$   
 $2x + 3y = 5$

b)  $3x + 2y = 12$   
 $x - y = -1$

c)  $7x - 4y = 4$   
 $11x + 2y = -2$

d)  $x + 3y = -1$   
 $-x + 2y = -4$

e)  $6x - 2y = 12$   
 $-5x + y = -12$

**Question 4.** Solve the following systems of equations by any method.

a)  $2x + 3y + 5 = 4$   
 $x - 4y + 7 = 12$

b)  $10x - 10y + 2 = 3y - 20$   
 $5 + y = x + 6$

c)  $4y + 3x = 7y$   
 $5x - y = -2x - y - 7$

d)  $5x - 2y + 8 = 6y + 6x + 7$   
 $12x - 10 = 4y + 2$

e)  $3y - x + 1 = -5 - y$   
 $x + y = y - 2$

*You can check your answers on page 275.*