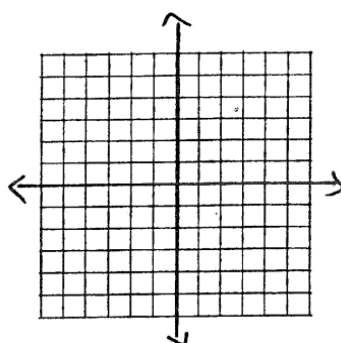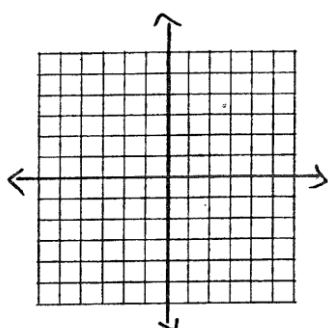**Worksheet 7.4 – Applications of Linear Systems – Textbook pages 418-424**

Solve the linear system using any method.

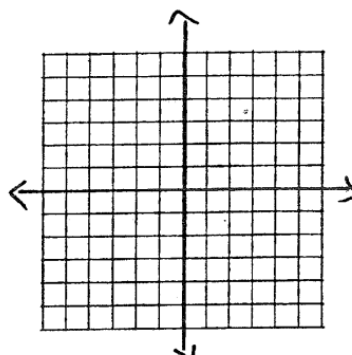## LEVEL 1

1) $2x - 3y = 24$
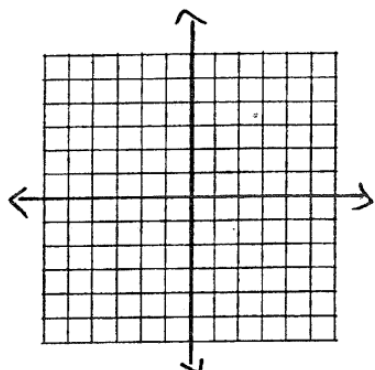 $2x + y = 8$

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

LEVEL 2

3) $x + y = 50$
   $3x - 2y = 0$
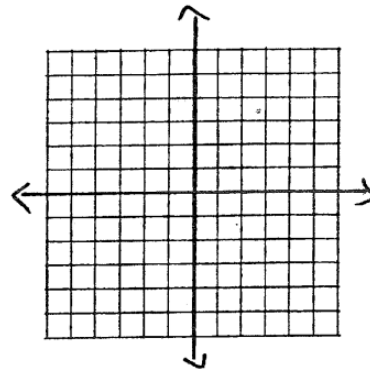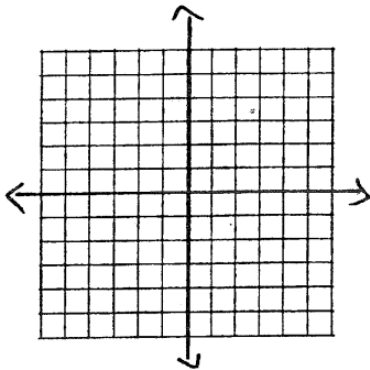
4) $3x - y = 9$
   $x + 2y = 10$

Solve the linear system using any method.

LEVEL 3

5) $4x - 6 = 2y$
   $-3x + 2y = -3$

6) $-9x + 3y = -6$
   $-3x + y = -2$

LEVEL 4

7) You are buying the meat for a cookout. You need to buy 8 packages of meat. A package of hotdogs cost $1.89 and a package of hamburgers costs $5.19. You spend a total of $31.62. Write and solve a system of equations to find the number of packages of each type of meat bought.

8) A sporting goods store sells right-handed and left-handed baseball gloves. In one month, 12 gloves were sold for a total revenue of $561. Right-handed gloves cost $45 and left-handed gloves cost $52. Find the number of each type of glove sold. Write a system and solve.