Name_____**Date**_____**Hour**_____

Worksheet 7.2 – Solving Linear Systems by Substitution – Textbook pages 405-410

LEVEL 1

Solve for the indicated variable. Show your work.

1) $5x + y = -8$; y

2) $-3x - 3y = -9$; y

3) $x + 3y = 7$; x

LEVEL 2

Tell which equation you would use to isolate a variable. Explain.

4) $4x - y = -6$
$2x + y = 0$

5) $-m + 5n = 16$
$-2m + 3n = 4$

LEVEL 3

Use the substitution method to solve the linear system. Show your work.

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

7) $4x + y = 2$
$x - y = -17$

8) $x - y = 10$
$5x - y = -6$

9) $2x + y = 7$
$4x + 2y = -10$

LEVEL 4

10) You are selling tickets for a high school play. Student tickets cost $3 and general admission tickets cost $5. You sell 149 tickets and collect $577. How many of each type ticket did you sell? Write a system and solve.

11) Your History test is worth 200 points and contains 44 questions. Each question is worth either 6 points or 4 points. How many 4 point questions are on the test? How many 6 point questions are there? Write a system and solve.