

## Practice Set Answers Chapter 5

### 5.1

1. Yes 2. Yes 3. No 4. No 5.  $\{(-1, -3)\}$  6. infinitely many solutions  
 $\{(x, y) \mid 8x - 2y = 6\}$  or  $\{(x, y) \mid 4x + y = 3\}$  7.  $\{(4, 1)\}$  8.  $\{(2, -3)\}$  9. No Solution  
 10.  $\{(3, 2)\}$  11.  $\{(5, -5)\}$  12.  $\{(-3, 4)\}$  13.  $\{(1, -4)\}$  14. infinitely many solutions  
 $\{(x, y) \mid 2x - y = 4\}$  or  $\{(x, y) \mid 6x - 3y = 12\}$

### 5.2

1.  $\{(-2, 1)\}$  2.  $\{(4, 0)\}$  3.  $\left\{\left(\frac{7}{19}, \frac{-4}{19}\right)\right\}$  4.  $\{(3, -2)\}$  5.  $\{(4, -2)\}$  6.  $\{(1, 1)\}$   
 7. No Solution 8.  $\{(1, -2)\}$  9.  $\{(2, 1)\}$  10.  $\left\{\left(-2, \frac{11}{3}\right)\right\}$  11. infinitely many solutions  
 $\{(x, y) \mid 4x - y = 10\}$  or  $\{(x, y) \mid 8x - 2y = 20\}$  12.  $\{(3, 2)\}$  13.  $\{(5, -8)\}$  14.  $\{(3, 0)\}$   
 15.  $\{(4, 2)\}$  16.  $\{(12, 10)\}$  17.  $\{(5, 1)\}$  18. No Solution

### 5.3

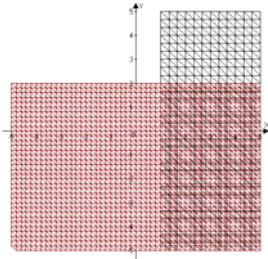
1.  $\{(-4, -6)\}$  2.  $\{(1, 8)\}$  3.  $\{(-5, 2)\}$  4.  $\{(4, 2)\}$  5.  $\{(-4, 3)\}$  6.  $\{(-7, -5)\}$   
 7.  $\{(0, 1)\}$  8. infinitely many solutions  $\{(x, y) \mid 3x + 6y = 12\}$  or  $\{(x, y) \mid x + 2y = 4\}$   
 9.  $\{(4, 1)\}$  10. No Solution 11.  $\{(-5, -3)\}$  12.  $\{(5, -1)\}$  13. No Solution 14.  $\{(0, 5)\}$   
 15.  $\{(1, 9)\}$  16.  $\{(2, -2)\}$  17.  $\{(5, 3)\}$  18.  $\{(5, -3)\}$

### 5.4

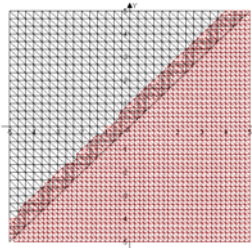
1. 4 and 7 2. 8 and -6 3. -4 and -12 4. 175 adult tickets, 125 children's tickets  
 5. width = 15 centimeters, length = 24 centimeters 6. width = 8 inches, length = 20 inches  
 7. width = 100 feet, length = 150 feet 8. 12 nickels, 13 quarters.  
 9. 45 of the 30¢ stamps, 55 of the 39¢ stamps 10. socks \$3, sweaters \$24  
 11. 9 hrs. at coffee shop, 15 hrs. cleaning offices 12. 11 neon Tetras, 7 giant Danios

### 5.5

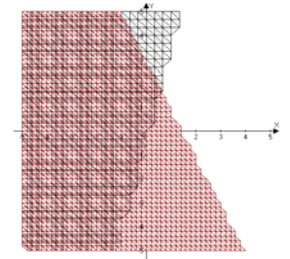
1.



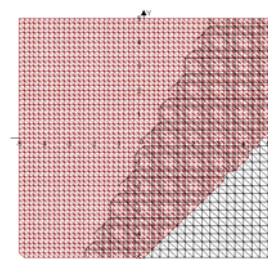
2.



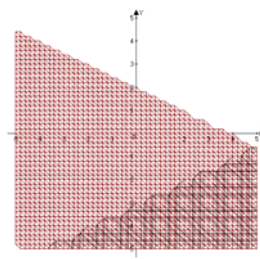
3.



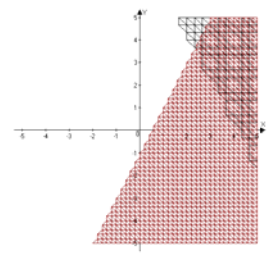
4.



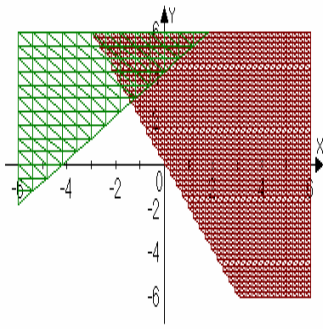
5.



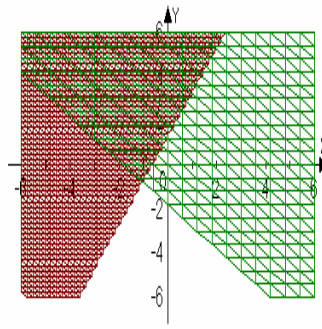
6.



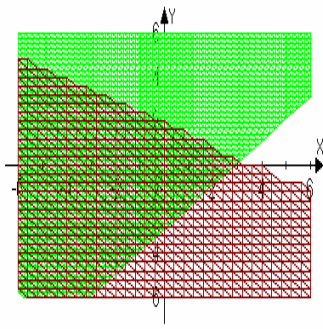
7.



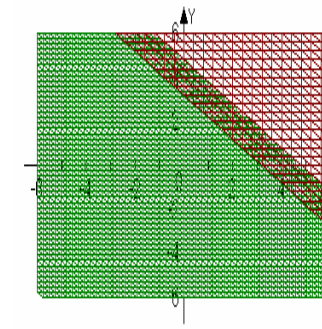
8.



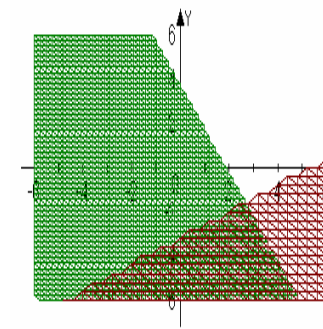
9.



10.



11.



12.

