

Determine whether the given ordered pair is a solution of the system.

- 1) $(4, -1)$ 1) _____
 $3x - y = 11$
 $2x + 3y = 5$
 A) solution B) not a solution

Solve the system of equations by the substitution method.

- 2) 2) _____
 $y = 4x - 1$
 $4y - 20x = 12$
 A) $\{(4, -17)\}$ B) $\{(-17, -4)\}$ C) $\{(-4, -17)\}$ D) \emptyset

- 3) $y = \frac{1}{6}x + 15$ 3) _____
 $y = \frac{4}{5}x + 53$
 A) $\{(-90, 0)\}$ B) $\{(-60, 5)\}$ C) $\{(-60, -5)\}$ D) $\left\{-\frac{59}{6}, \frac{115}{19}\right\}$

Solve the system by the addition method.

- 4) $x + y = -5$ 4) _____
 $x - y = 14$
 A) $\{(5, -9.5)\}$ B) $\{(5, 4.5)\}$ C) $\{(4.5, 9.5)\}$ D) $\{(4.5, -9.5)\}$

- 5) $5x + 6y = 47$ 5) _____
 $5x + 2y = 59$
 A) $\{(13, -3)\}$ B) $\{(-3, 13)\}$ C) $\{(-13, 6)\}$ D) $\{(-13, 5)\}$

- 6) $x - 6y = 46$ 6) _____
 $7x - 7y = 77$
 A) $\{(-4, -6)\}$ B) $\{(4, -7)\}$ C) $\{(3, -6)\}$ D) \emptyset

Solve the system by the method of your choice. Identify systems with no solution and systems with infinitely many solutions, using set notation to express their solution sets.

- 7) $3x + y = 14$ 7) _____
 $12x + 4y = 56$
 A) $\{(5, -1)\}$ B) $\{(0, 14)\}$
 C) $\{(x, y) \mid 3x + y = 14\}$ D) \emptyset

Determine if the given ordered triple is a solution of the system.

- 8) $(-1, 5, 1)$ 8) _____
 $x + y + z = 5$
 $x - y + 5z = -1$
 $2x + y + z = 4$
 A) not a solution B) solution

Solve the system of equations.

9) $x + y + z = 4$
 $x - y + 2z = -3$
 $3x + y + z = 14$
 A) $\{(5, 2, -3)\}$

B) $\{(-3, 2, 5)\}$

C) $\{(2, 5, -3)\}$

D) $\{(-3, 5, 2)\}$

9) _____

10) $x - y + 2z = 6$
 $4x + z = 4$
 $x + 3y + z = 10$
 A) $\{(4, 0, 2)\}$

B) $\{(4, 2, 0)\}$

C) $\{(0, 2, 4)\}$

D) $\{(2, 0, 4)\}$

10) _____

11) $x - y + z = 1$
 $x + y + z = 5$
 $x + y - z = 9$
 A) $\{(2, -2, 5)\}$

B) $\{(-2, 5, 2)\}$

C) $\{(5, -2, 2)\}$

D) $\{(5, 2, -2)\}$

11) _____

12) $x + 2y + 4z = 14$
 $3y + 2z = -5$
 $z = 5$
 A) $\{(4, 5, -5)\}$

B) $\{(4, -5, 5)\}$

C) $\{(5, -5, 4)\}$

D) $\{(-5, 4, 5)\}$

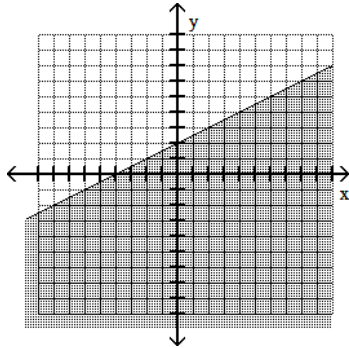
12) _____

Graph the inequality.

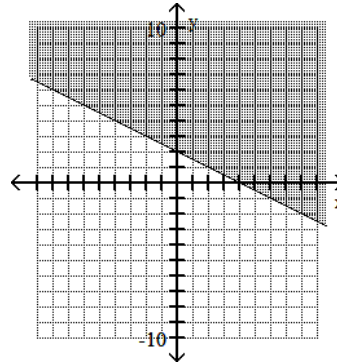
13) $-2x - 4y \leq -8$

13) _____

A)



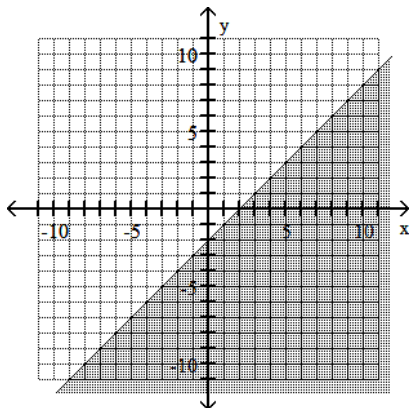
B)



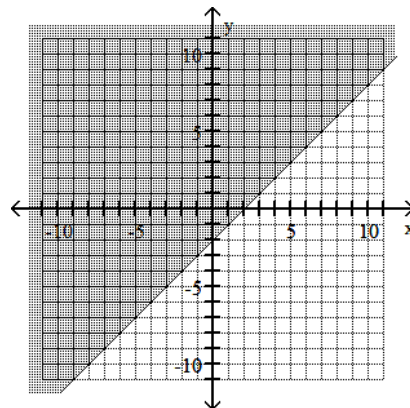
14) $y \geq x - 2$

14) _____

A)



B)

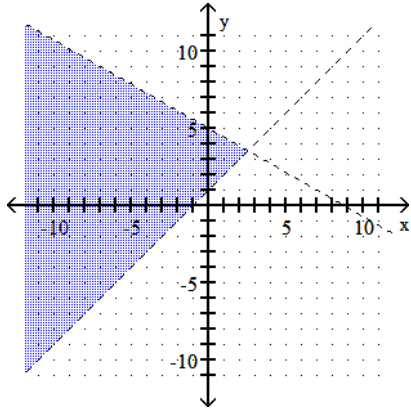


Graph the solution set of the system of inequalities or indicate that the system has no solution.

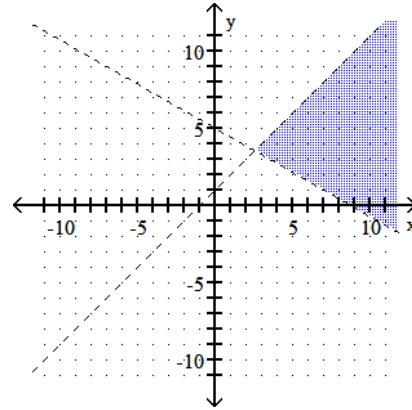
15) $y < x + 1$
 $4x + 7y > 35$

15) _____

A)



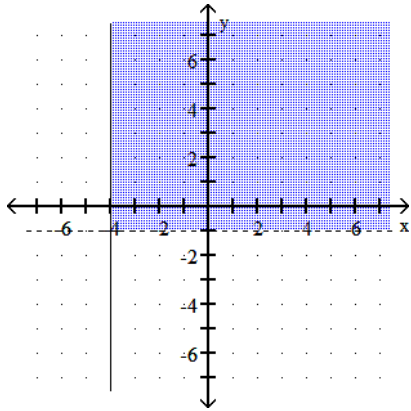
B)



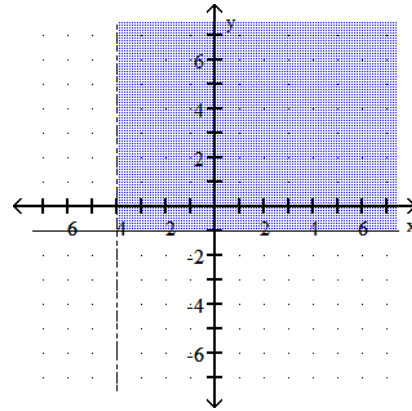
16) $y > -1$
 $x \geq -4$

16) _____

A)



B)



Answer Key

Testname: REVIEW04_MAC1105

- 1) B
- 2) C
- 3) B
- 4) D
- 5) A
- 6) B
- 7) C
- 8) B
- 9) A
- 10) C
- 11) D
- 12) B
- 13) B
- 14) B
- 15) B
- 16) A