

Solve the system by the elimination method.

1) $x + 31 = y$ 1) _____
 $x + 2y = -34$
 A) $\{(-32, -1)\}$ B) \emptyset C) $\{(-6, -1)\}$ D) $\{(-5, -1)\}$

2) $8x - 7y = 5$ 2) _____
 $-16x + 14y = -20$
 A) $\{(8, 5)\}$ B) \emptyset C) $\left\{\left\{\frac{8}{15}, -\frac{7}{15}\right\}\right\}$ D) $\{(2, 4)\}$

3) $3x + 6y = -5$ 3) _____
 $-18x - 36y = 30$
 A) $\{(x, y) \mid 3x + 6y = -5\}$ B) \emptyset
 C) $\{(3, -5)\}$ D) $\{(2, 3)\}$

Solve the system of equations by substitution.

4) 4) _____

$$\begin{cases} 9x + y = 0 \\ -9x + y = -18 \end{cases}$$
 A) $x = 1, y = 18; (1, 18)$ B) $x = -1, y = -9; (-1, -9)$
 C) $x = -1, y = 9; (-1, 9)$ D) $x = 1, y = -9; (1, -9)$

5) 5) _____

$$\begin{cases} 2x + 9y = -8 \\ x + \frac{1}{3}y = \frac{13}{3} \end{cases}$$
 A) $x = -5, y = 2; (-5, 2)$ B) $x = 5, y = 2; (5, 2)$
 C) $x = -5, y = -2; (-5, -2)$ D) $x = 5, y = -2; (5, -2)$

Solve the problem.

6) A contractor mixes concrete from bags of pre-mix for small jobs. How many bags with 8% cement should he mix with 5 bags of 14.6% cement to produce a mix containing 11% cement? 6) _____
 A) 11 bags B) 6 bags C) 16 bags D) 8 bags

Solve the system of equations by elimination.

7) 7) _____

$$\begin{cases} 5x + 3y = 80 \\ 2x + y = 30 \end{cases}$$
 A) $x = 10, y = 0; (10, 0)$ B) $x = 10, y = 10; (10, 10)$
 C) $x = 0, y = 0; (0, 0)$ D) $x = 0, y = 10; (0, 10)$

Solve the problem.

8) Carole's car averages 12.3 miles per gallon in city driving and 25.1 miles per gallon in highway driving. If she drove a total of 384.3 miles on 25 gallons of gas, how much of the gas (to the nearest gallon) was used for city driving? 8) _____
 A) 6 gallons B) 19 gallons C) 11 gallons D) 21 gallons

- 9) The Family Fine Arts Center charges \$22 per adult and \$14 per senior citizen for its performances. On a recent weekend evening when 571 people paid admission, the total receipts were \$9,378. How many who paid were senior citizens?
- A) 173 senior citizens B) 263 senior citizens
 C) 308 senior citizens D) 398 senior citizens

9) _____

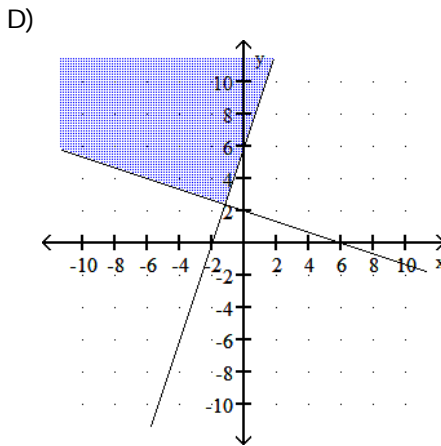
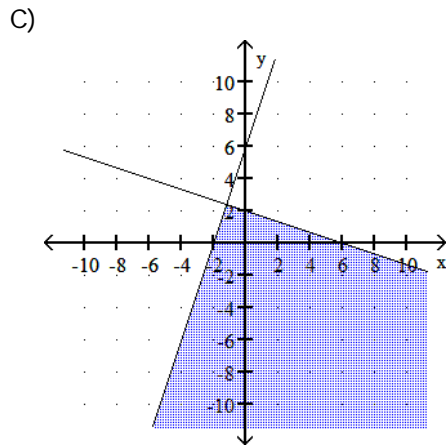
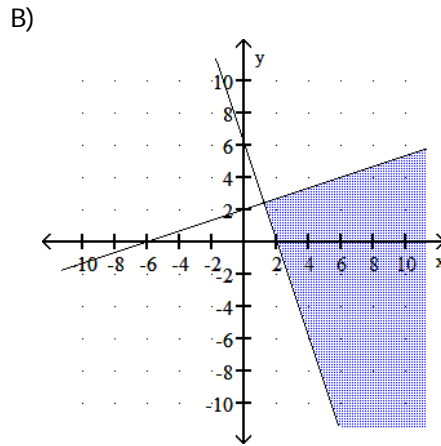
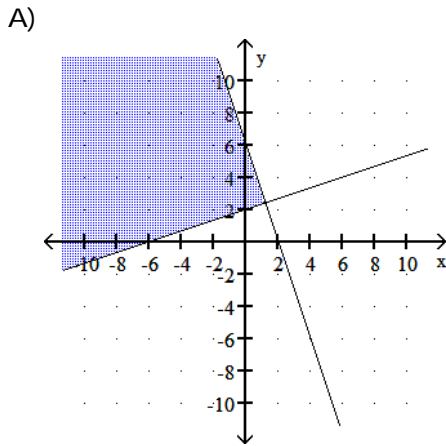
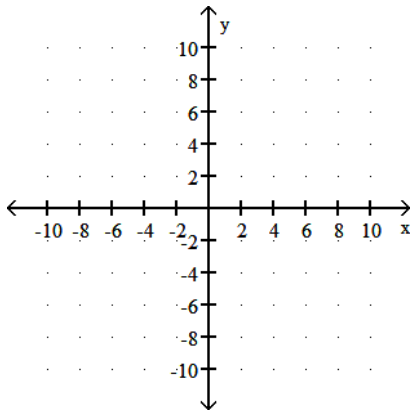
- 10) A movie theater charges \$8.00 for adults and \$5.00 for children. If there were 40 people altogether and the theater collected \$272.00 at the end of the day, how many of them were adults?
- A) 10 adults B) 29 adults C) 24 adults D) 16 adults

10) _____

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

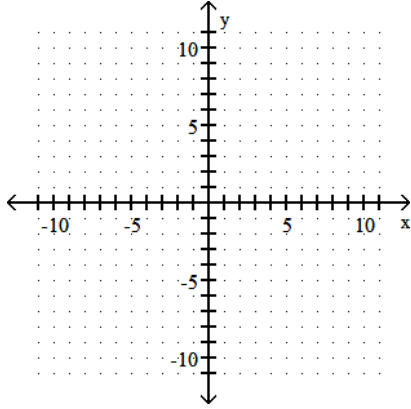
- 11) $3x - y \leq -6$
 $x + 3y \geq 6$

11) _____

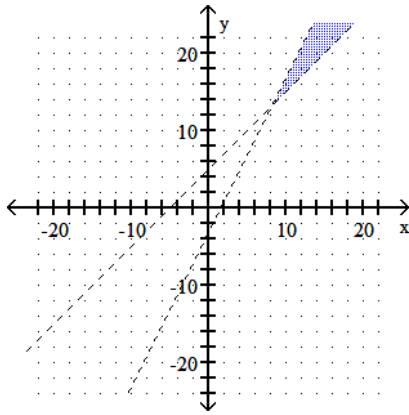


12) $y < -x + 5$
 $y > 2x - 3$

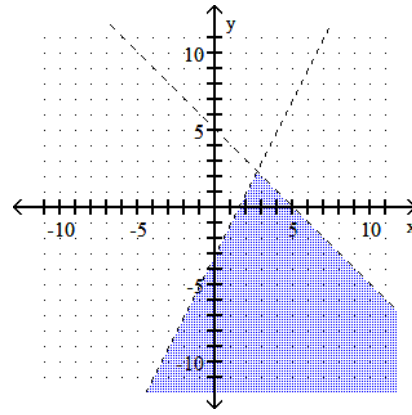
12) _____



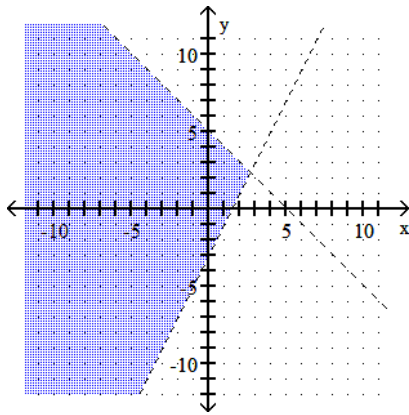
A)



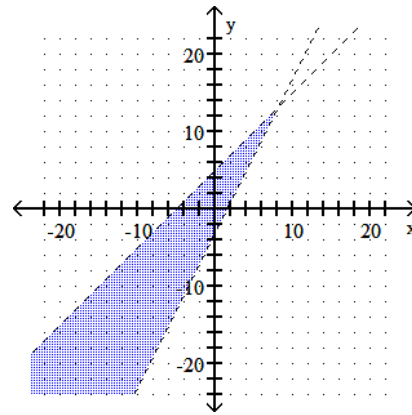
B)



C)



D)



Answer Key

Testname: REVIEW2

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