

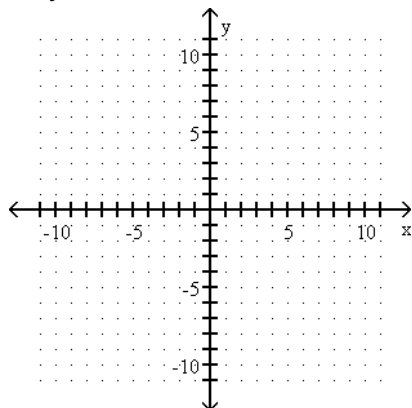
MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

Solve the system by graphing.

1)

1) _____

$$\begin{cases} x + 5y = 5 \\ 4x - 9y = -9 \end{cases}$$



A) (0, 1)

B) (1, 1)

C) (1, 0)

D) (0, 0)

Solve the system of equations.

2)

2) _____

$$\begin{cases} x + 9y = -18 \\ -6x + 10y = -20 \end{cases}$$

A) (2, 0)

B) $\emptyset$

C) (0, -2)

D) (1, -3)

3)

3) _____

$$\begin{cases} x + 6y = 1 \\ -7x + 7y = -7 \end{cases}$$

A) $\emptyset$

B) (-1, -1)

C) (2, 1)

D) (1, 0)

4)

4) _____

$$\begin{cases} 9x - 6y = 39 \\ \frac{1}{2}x + y = \frac{7}{2} \end{cases}$$

A) (4, 2)

B) (5, 2)

C) (5, 1)

D) $\emptyset$

5)

5) _____

$$\begin{cases} 2x + 12y = -70 \\ 12x + 3y = 63 \end{cases}$$

A) (12, -12)

B) (7, -7)

C) (-3, 7)

D) (-7, 7)

6)

6) _____

$$\begin{cases} -3x + 7y = 9 \\ 7x + 3y = 37 \end{cases}$$

A) (-4, -3)

B) (-4, 3)

C) (4, -3)

D) (4, 3)

Solve.

- 7) Two cars leave a city and head in the same direction. After 2 hours, the faster car is 12 miles ahead of the slower car. The slower car has traveled 94 miles. Find the speeds of the two cars. 7) _____
A) 49 mph and 55 mph B) 60 mph and 66 mph
C) 47 mph and 53 mph D) 41 mph and 47 mph
- 8) A chemist needs 90 milliliters of a 20% solution but has only 4% and 40% solutions available. Find how many milliliters of each that should be mixed to get the desired solution. 8) _____
A) 55 ml of 4%; 35 ml of 40% B) 50 ml of 4%; 40 ml of 40%
C) 55 ml of 4%; 40 ml of 40% D) 40 ml of 4%; 50 ml of 40%
- 9) The manager of a bulk foods establishment sells a trail mix for \$5 per pound and premium cashews for \$14 per pound. The manager wishes to make a 126-pound trail mix-cashew mixture that will sell for \$10 per pound. How many pounds of each should be used? 9) _____
A) 98 pounds of trail mix B) 63 pounds of trail mix
28 pounds of cashews 63 pounds of cashews
C) 70 pounds of trail mix D) 56 pounds of trail mix
56 pounds of cashews 70 pounds of cashews
- 10) University Theater sold 529 tickets for a play. Tickets cost \$25 per adult and \$15 per senior citizen. If total receipts were \$9745, how many senior citizen tickets were sold? 10) _____
A) 271 senior citizen tickets B) 181 senior citizen tickets
C) 258 senior citizen tickets D) 348 senior citizen tickets