ID: b86123af

Hiro and Sofia purchased shirts and pants from a store. The price of each shirt purchased was the same and the price of each pair of pants purchased was the same. Hiro purchased 4 shirts and 2 pairs of pants for $86, and Sofia purchased 3 shirts and 5 pairs of pants for $166. Which of the following systems of linear equations represents the situation, if x represents the price, in dollars, of each shirt and y represents the price, in dollars, of each pair of pants?

A. $4x+2y=86$
$3x+5y=166$

B. $4x+3y=86$
$2x+5y=166$

C. $4x+2y=166$
$3x+5y=86$

D. $4x+3y=166$
$2x+5y=86$

ID: 608eeb6e

$$5x = 15$$
$$-4x + y = -2$$

The solution to the given system of equations is (x, y). What is the value of $x + y$?

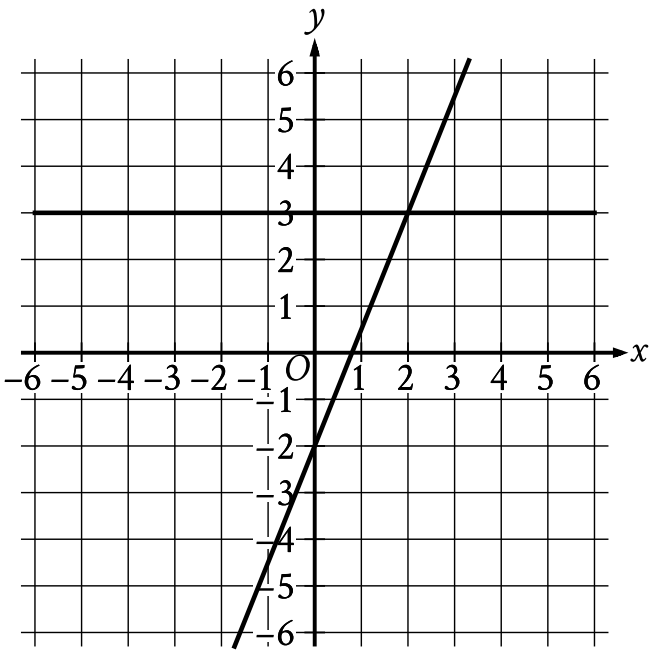
A. -17

B. -13

C. 13

D. 17

ID: b0fc3166



The graph of a system of linear equations is shown. What is the solution (x, y) to the system?

A. $(0, 3)$

B. $(1, 3)$

C. $(2, 3)$

D. $(3, 3)$

ID: dba8d38a

A petting zoo sells two types of tickets. The standard ticket, for admission only, costs $5. The premium ticket, which includes admission and food to give to the animals, costs $12. One Saturday, the petting zoo sold a total of 250 tickets and collected a total of $2,300 from ticket sales. Which of the following systems of equations can be used to find the number of standard tickets, *s*, and premium tickets, *p*, sold on that Saturday?

A. $\begin{aligned} s+p&=250 \\ 5s+12p&=2{,}300 \end{aligned}$

B. $\begin{aligned} s+p&=250 \\ 12s+5p&=2{,}300 \end{aligned}$

C. $\begin{aligned} 5s+12p&=250 \\ s+p&=2{,}300 \end{aligned}$

D. $\begin{aligned} 12s+5p&=250 \\ s+p&=2{,}300 \end{aligned}$

ID: aff28230

$$x = 10$$
$$y = x + 21$$

The solution to the given system of equations is (x, y). What is the value of y?

A. 2.1

B. 10

C. 21

D. 31

ID: 8abed0fb

$$y = 2x + 3$$
$$x = 1$$

What is the solution (x, y) to the given system of equations?

A. $(1, 2)$

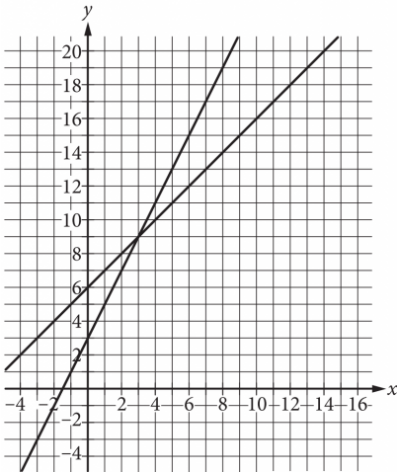
B. $(1, 5)$

C. $(2, 3)$

D. $(2, 7)$

ID: e1259a5a

A system of two linear equations is graphed in the *xy*-plane below.



Which of the following points is the solution to the system of equations?

A. $(3,9)$

B. $(6,15)$

C. $(8,10)$

D. $(12,18)$

ID: ca9bb527

$$y = 4x - 9$$
$$y = 19$$

What is the solution (x, y) to the given system of equations?

A. $(4, 19)$

B. $(7, 19)$

C. $(19, 4)$

D. $(19, 7)$

ID: f88970cc

$$x = 5$$
$$y = x - 8$$

Which of the following points (x, y) is the solution to the given system of equations in the *xy*-plane?

A. $(0, 0)$

B. $(5, -3)$

C. $(5, -8)$

D. $(5, 8)$

ID: ece00725

Connor has c dollars and Maria has m dollars. Connor has 4 times as many dollars as Maria, and together they have a total of $\$25.00$. Which system of equations represents this situation?

A. $c = 4m$
$c + m = 25$

B. $m = 4c$
$c + m = 25$

C. $c = 25m$
$c + m = 4$

D. $m = 25c$
$c + m = 4$

ID: ee031767

A dance teacher ordered outfits for students for a dance recital. Outfits for boys cost $26, and outfits for girls cost $35. The dance teacher ordered a total of 28 outfits and spent $881. If b represents the number of outfits the dance teacher ordered for boys and g represents the number of outfits the dance teacher ordered for girls, which of the following systems of equations can be solved to find b and g ?

A. $\begin{aligned} 26b+35g&=28 \\ b+g&=881 \end{aligned}$

B. $\begin{aligned} 26b+35g&=881 \\ b+g&=28 \end{aligned}$

C. $\begin{aligned} 26g+35b&=28 \\ b+g&=881 \end{aligned}$

D. $\begin{aligned} 26g+35b&=881 \\ b+g&=28 \end{aligned}$

ID: cd33b015

$$x + y = 20$$
$$2(x + y) + 3y = 85$$

If (x, y) is the solution to the given system of equations, what is the value of y?

A. 10

B. 15

C. 60

D. 65

ID: 4ec95eab

$$y = -3x$$
$$4x + y = 15$$

The solution to the given system of equations is (x, y). What is the value of x?

A. 1

B. 5

C. 15

D. 45

ID: 0d1dca87

$$3x + y = 29$$
$$x = 2$$

If (x, y) is the solution to the given system of equations, what is the value of y?

ID: 0df106df

An online bookstore sells novels and magazines. Each novel sells for $4, and each magazine sells for $1. If Sadie purchased a total of 11 novels and magazines that have a combined selling price of $20, how many novels did she purchase?

A. 2

B. 3

C. 4

D. 5

ID: 7d89376f

A discount airline sells a certain number of tickets, x, for a flight for \$90 each. It sells the number of remaining tickets, y, for \$250 each. For a particular flight, the airline sold 120 tickets and collected a total of \$27,600 from the sale of those tickets. Which system of equations represents this relationship between x and y ?

A. $\begin{cases} x+y=120 \\ 90x+250y=27{,}600 \end{cases}$

B. $\begin{cases} x+y=120 \\ 90x+250y=120(27{,}600) \end{cases}$

C. $\begin{cases} x+y=27{,}600 \\ 90x+250y=120(27{,}600) \end{cases}$

D. $\begin{cases} 90x=250y \\ 120x+120y=27{,}600 \end{cases}$

ID: 44d65912

Angela is playing a video game. In this game, players can score points only by collecting coins and stars. Each coin is worth c points, and each star is worth s points.

- The first time she played, Angela scored 700 points. She collected 20 coins and 10 stars.
- The second time she played, Angela scored 850 points. She collected 25 coins and 12 stars.

Which system of equations can be used to correctly determine the values of c and s?

A. $\begin{aligned} 10c+20s&=700 \\ 12c+25s&=850 \end{aligned}$

B. $\begin{aligned} 20c+10s&=700 \\ 25c+12s&=850 \end{aligned}$

C. $\begin{aligned} 20c+700s&=10 \\ 25c+850s&=12 \end{aligned}$

D. $\begin{aligned} 700c+20s&=10 \\ 850c+25s&=12 \end{aligned}$

ID: 17f176ec

A movie theater charges $11 for each full-price ticket and $8.25 for each reduced-price ticket. For one movie showing, the theater sold a total of 214 full-price and reduced-price tickets for $2,145. Which of the following systems of equations could be used to determine the number of full-price tickets, *f*, and the number of reduced-price tickets, *r*, sold?

A. $f+r=2{,}145$
$11f+8.25r=214$

B. $f+r=214$
$11f+8.25r=2{,}145$

C. $f+r=214$
$8.25f+11r=2{,}145$

D. $f+r=2{,}145$
$8.25f+11r=214$

ID: 4b76c7f1

$$2x + 7y = 9$$
$$8x + 28y = a$$

In the given system of equations, a is a constant. If the system has infinitely many solutions, what is the value of a ?

A. 4

B. 9

C. 36

D. 54