

#1

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) $4x + 3y = 166$
 $2x + 5y = 86$

#2

ID: 608eeb6e

$$5x = 15$$

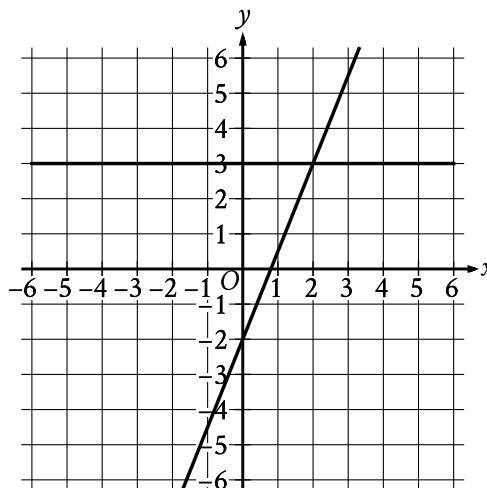
$$-4x + y = -2$$

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

#3

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) $(3, 3)$

#4

ID: cdec4c87

$$y = 12x - 20$$

$$y = 28$$

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

- A) $(4, 28)$
- B) $(20, 28)$
- C) $(28, 4)$
- D) $(28, 20)$

#5

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) $s + p = 250$
 $5s + 12p = 2,300$
- B) $s + p = 250$
 $12s + 5p = 2,300$
- C) $5s + 12p = 250$
 $s + p = 2,300$
- D) $12s + 5p = 250$
 $s + p = 2,300$

#6

ID: f5563c26

$$y = 4$$

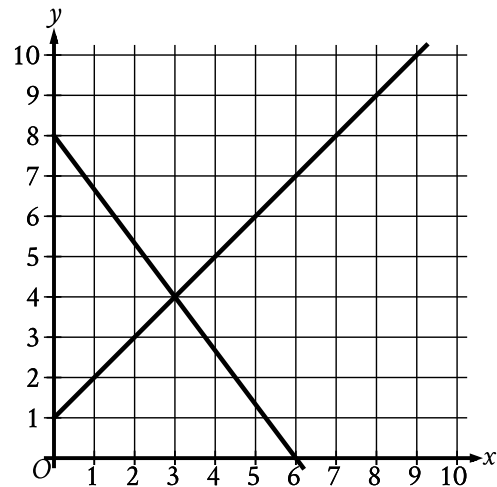
$$x = y + 6$$

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

- A) 10
- B) 6
- C) 4
- D) 2

#7

ID: e6545fa8



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

- A) (2, 3)
- B) (3, 4)
- C) (4, 5)
- D) (5, 6)

#8

ID: 317e80f9

$$x + y = 18$$

$$5y = x$$

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

- A) $(15, 3)$
- B) $(16, 2)$
- C) $(17, 1)$
- D) $(18, 0)$

#10

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) $(2, 7)$

#9

ID: aff28230

$$x = 10$$

$$y = x + 21$$

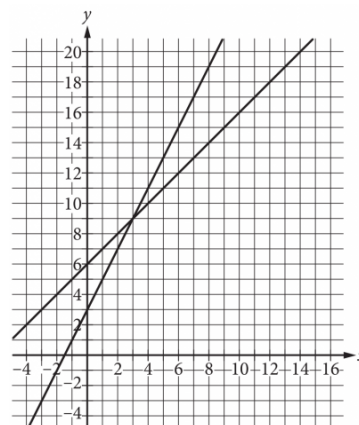
The solution to the given system of equations is (x, y) .
What is the value of y ?

- A) 2.1
- B) 10
- C) 21
- D) 31

#11

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) $(12, 18)$

#12

ID: 9db5b5c1

$$4x = 20$$

$$-3x + y = -7$$

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

- A) -27
- B) -13
- C) 13
- D) 27

#14

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) $(5, 8)$

#13

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) $(19, 7)$

#15

ID: ffb371f5

$$3x = 12$$

$$-3x + y = -6$$

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

- A) -3
- B) 6
- C) 18
- D) 30

#16

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) $m = 25c$

$c + m = 4$

#17

ID: e0177f5f

$$x = 4$$

$$y = 5 - x$$

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

A) 1

B) 4

C) 5

D) 9

#18

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

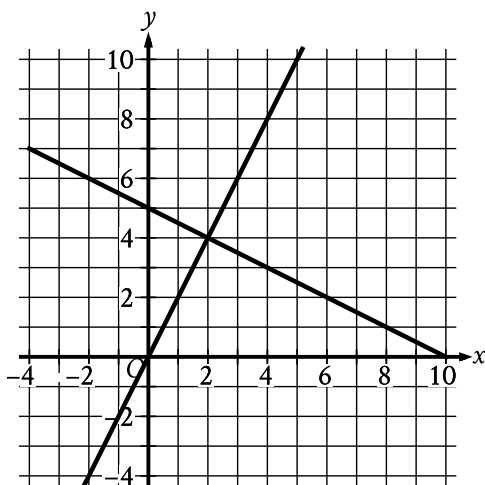
B)
$$\begin{aligned} 26b + 35g &= 881 \\ b + g &= 28 \end{aligned}$$

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

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

#19

ID: 1006cad7



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

- A) $(0, 5)$
- B) $(2, 4)$
- C) $(5, 10)$
- D) $(10, 0)$

#20

ID: 939fc21b

$$s + 7r = 27$$

$$r = 3$$

What is the solution (r, s) to the given system of equations?

- A) $(6, 3)$
- B) $(3, 6)$
- C) $(3, 27)$
- D) $(27, 3)$

#21

ID: aacc834b

$$x = 8$$

$$x + 3y = 26$$

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

#22

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

#23

ID: 4ec95eab

$$y = -3x$$

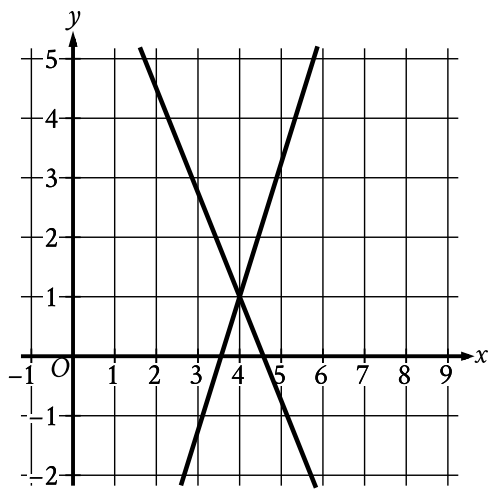
$$4x + y = 15$$

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

#24

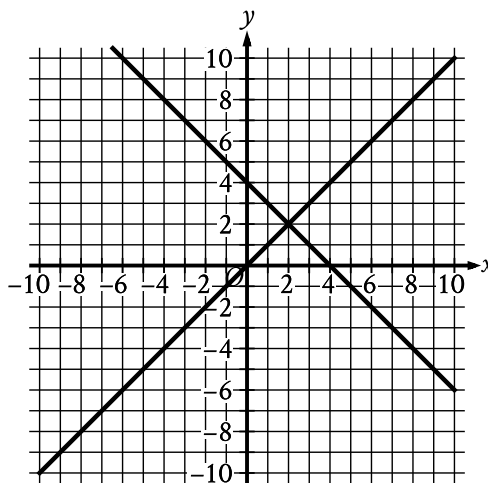
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The graph of a system of linear equations is shown. The solution to the system is (x, y) . What is the value of x ?

#25

ID: f6b055dc



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

- A) $(0, 4)$
- B) $(2, 2)$
- C) $(4, 0)$
- D) $(4, 4)$

#26

ID: 0d1dca87

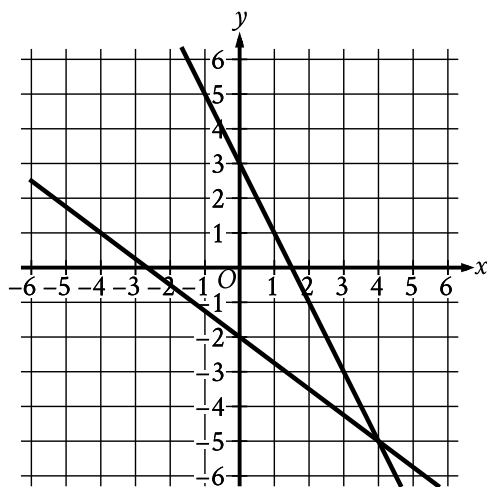
$$3x + y = 29$$

$$x = 2$$

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

#27

ID: ccc3ad6b



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

- A) $(4, -5)$
- B) $(0, 3)$
- C) $(0, -2)$
- D) $(-2, 3)$

#28

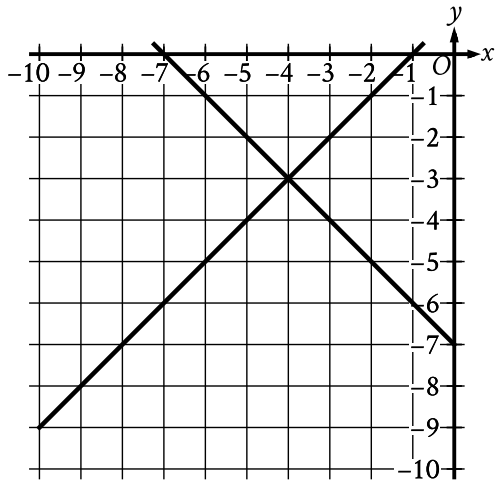
ID: 0df106df

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

#29

ID: 5f46fc76



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

- A) $(0, -7)$
- B) $(0, -3)$
- C) $(-4, -3)$
- D) $(-4, 0)$

#30

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

#31

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) $\begin{cases} f + r = 2,145 \\ 11f + 8.25r = 214 \end{cases}$
- B) $\begin{cases} f + r = 214 \\ 11f + 8.25r = 2,145 \end{cases}$
- C) $\begin{cases} f + r = 214 \\ 8.25f + 11r = 2,145 \end{cases}$
- D) $\begin{cases} f + r = 2,145 \\ 8.25f + 11r = 214 \end{cases}$

#32

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) $10c + 20s = 700$
 $12c + 25s = 850$
- B) $20c + 10s = 700$
 $25c + 12s = 850$
- C) $20c + 700s = 10$
 $25c + 850s = 12$
- D) $700c + 20s = 10$
 $850c + 25s = 12$

#33

ID: 4b76c7f1

$$\begin{aligned}2x + 7y &= 9 \\ 8x + 28y &= a\end{aligned}$$

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