

5.3 Puzzle Time

What Did The Bowling Pins Say To The Bowling Ball?

Write the letter of each answer in the box containing the exercise number.

Solve the system of linear equations by elimination.

Check your solution.

1. $x + 7y = -5$
 $-x + y = -3$

2. $6x + y = 25$
 $9x - y = 20$

3. $8x + \frac{1}{2}y = 32$
 $-x - \frac{1}{2}y = -4$

4. $11x - 6y = -19$
 $-11x + 5y = 14$

5. $x + y = 1$
 $3x - 4y = -4$

6. $\frac{1}{3}x + y = 6$
 $-x - 2y = -9$

7. $5x - 2y = 9$
 $2x - 5y = -9$

8. $-2x - 3y = 5$
 $-3x - 4y = 9$

9. $7x + 2y = -12$
 $3x + 4y = -24$

10. $6x + 5y = 10$
 $-2x - 3y = -14$

11. $8x - 9y = -2$
 $-3x + 13y = 20$

12. $-12x - 5y = -22$
 $8x + 3y = 13$

13. On one reading list, there were a total of 12 fiction and nonfiction books. On the second reading list, there were 2 times as many fiction books and 3 times as many nonfiction books, making a total of 28 books on the second reading list. Solve a system of linear equations to find the number of fiction and nonfiction books on the first reading list.

Answers

A. (4, 0)

R. (-9, 9)

P. $(-\frac{1}{4}, 5)$

S. (3, 7)

E. (2, 2)

S. (-5, 8)

U. (0, 1)

E. (2, -1)

L. (3, 3)

S. (0, -6)

E. (1, 5)

P. (8, 4)

A. (-7, 3)

13	7	11	3	9	4		10	12	8	6	1		5	2
----	---	----	---	---	---	--	----	----	---	---	---	--	---	---