What Kind of Shoes Does a Frog Wear?

Solve each system of equations by the addition method. (You may first have to multiply both sides of one equation by \(-1\).) Find your answer below and cross out the letter above it. When you finish, the answer to the title question will remain.

1. \[5x - 2y = 4\]
   \[+\ (x + 2y = 8)\]
   \[6x = 12\]
   \[\text{(2, 3)}\]

2. \[-3x + 2y = 11\]
   \[+\ (3x - 4y = -19)\]
   \[2y = -8\]
   \[-\text{(1, 4)}\]

3. \[3x + y = 13\]
   \[-\ (x + y = 3)\]
   \[2x = 10\]
   \[\text{(5, -2)}\]

4. \[6x - 2y = 10\]
   \[-\ (x - 2y = -5)\]
   \[5x = 15\]
   \[\text{(3, 4)}\]

5. \[5x + y = 2\]
   \[-\ (5x - 3y = 14)\]
   \[4y = -12\]
   \[\text{(1, -3)}\]

6. \[7x - 4y = -10\]
   \[4y = x - 2\]
   \[6x = -12\]
   \[\text{(2, -1)}\]

7. \[x = 5 - 9y\]
   \[x + 9y = 5\]
   \[4x + 9y = -7\]
   \[\text{(-4, 1)}\]

8. \[3x = 5y - 9\]
   \[3x - 5y = -9\]
   \[2y = 3x + 3\]
   \[\text{(1/2, 2)}\]

9. \[x + 2y = -2\]
   \[-\ (4x + 2y = 17)\]
   \[-3x = 15\]
   \[\text{(5, 3/2)}\]

10. \[-6x - 5y = 20\]
    \[-6x - 5y = 20\]
    \[-y = 6x + 4\]
    \[-4y = 16\]
    \[\text{(-1/2, 4)}\]

11. \[-3x + y = -2\]
    \[-3x + y = -2\]
    \[-2 = 7x - y\]
    \[4x = -4\]
    \[\text{(-1, -5)}\]

12. \[10x - 5 = 3y\]
    \[10x - 3y = 5\]
    \[2x - 3y = 1\]
    \[8x = 4\]
    \[\text{(-1, 3)}\]

Solution:

- SHOES
- P. PRESENT
- N. T. TOAD
- E.
- X.
- A.
- D.

KEY

OPEN TOAD