Key

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. $5x - 2y = 4$
   $x + 2y = 8$ $(2, 3)$

2. $-3x + 2y = 11$
   $3x - 4y = -19$ $(-1, 4)$

3. $3x + y = 13$
   $x + y = 3$ $(5, -2)$

4. $6x - 2y = 10$
   $x - 2y = -5$ $(3, 4)$

5. $5x + y = 2$
   $5x - 3y = 14$ $(1, -3)$

Rearrange

6. $7x - 4y = -10 \rightarrow 7x - 4y = -10$
   $4y = x - 2 \rightarrow -x + 4y = -2$
   $(-2, -1)$

7. $x = 5 - 9y \rightarrow x + 9y = 5$
   $4x + 9y = -7 \rightarrow 4x + 9y = -7$
   $(-4, 1)$

8. $3x = 5y - 9 \rightarrow 3x - 5y = -9$
   $2y = 3x + 3 \rightarrow -3x + 2y = 3$
   $(\frac{1}{3}, 2)$

9. $x + 2y = -2$
   $4x + 2y = -17$ $(-5, \frac{3}{2})$

10. $-6x - 5y = 20 \rightarrow -6x - 5y = 20$
    $-y = 6x + 4 \rightarrow -6x - y = 4$
    $(0, -4)$

11. $-3x + y = -2 \rightarrow -3x + y = -2$
    $-2 = 7x - y \rightarrow 7x - y = -2$
    $(-1, -5)$

12. $10x - 5 = 3y \rightarrow 10x - 3y = 5$
    $2x - 3y = 1 \rightarrow 2x - 3y = 1$
    $(\frac{1}{2}, 0)$

S	H	O	A	D	P	R	E	S	A	N	T	I	O	E	N	A	I	D	R
$(0, -4)$	$(\frac{1}{2}, 0)$	$(3, 7)$	$(\frac{1}{3}, 2)$	$(-2, -1)$	$(-5, 3)$	$(3, 4)$	$(\frac{1}{2}, 2)$	$(2, 3)$	$(-4, 1)$	$(2, -4)$	$(-2, 2)$	$(-1, -5)$	$(-1, 6)$	$(-1, 4)$	$(-5, \frac{3}{2})$	$(5, -3)$	$(5, -2)$	$(-5, 4)$	$(1, -3)$

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OBJECTIVE 6–d: To solve systems of equations by the addition method (multiplication by −1 may be required).

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