

One, none, or many

Write the pair (x, y) , or say if there is no solution or infinitely many solutions.

1. $-4x + 4y = 16$, $5x + 4y = 43$

Answer: (3, 7)

2. $y = -x - 4$, $3y = -3x - 12$

Answer: infinitely many solutions

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

Answer: no solution

4. $y = -4x - 8$, $2y = -8x - 16$

Answer: infinitely many solutions

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

Answer: no solution

6. $y = 2x + 2$, $3y = 6x + 6$

Answer: infinitely many solutions

7. $y = -2x - 18$, $y = 2x + 10$

Answer: $(-7, -4)$

8. $2x + 4y = 3$, $6x + 12y = 11$

Answer: no solution

9. $y = x + 9$, $y = x - 12$

Answer: no solution

10. $-2x + y = 6$, $4x - 2y = -12$

Answer: infinitely many solutions

11. $y = -3x - 8$, $3y = -9x - 24$

Answer: infinitely many solutions

12. $2y = -6x + 6$, $y = -3x + 3$

Answer: infinitely many solutions