

One, none, or many

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

1. $-4x - 3y = -1$, $-8x - 6y = -2$

Answer: infinitely many solutions

2. $2x + 8y = -18$, $-x - 4y = 9$

Answer: infinitely many solutions

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

Answer: no solution

4. $-4x + y = 14$, $-12x + 3y = 44$

Answer: no solution

5. $-4x + 8y = -17$, $-2x + 4y = -8$

Answer: no solution

6. $y = x + 9$, $y = 3x + 15$

Answer: $(-3, 6)$

7. $x + y = -7$, $3x + 3y = -21$

Answer: infinitely many solutions

8. $2x - y = 17$, $2x + 3y = 13$

Answer: $(8, -1)$

9. $3x + 3y = 6$, $9x + 9y = 18$

Answer: infinitely many solutions

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

Answer: no solution

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

Answer: infinitely many solutions

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

Answer: no solution