

SYSTEMS OF LINEAR EQUATIONS**Solve each system by elimination.**

1) $-10x - 10y = -10$
 $x + y = -1$

2) $-2x - 10y = -6$
 $6x + 2y = -10$

3) $-12x - 2y = 16$
 $4x - 7y = 10$

4) $-10x + 2y = 20$
 $2x - y = -10$

5) $-10x + 8y = 16$
 $6x - 4y = -16$

6) $-7x - 3y = 28$
 $-5x + 9y = 20$

7) $-2x + 3y = -9$
 $8x - 10y = 18$

8) $-x + 3y = -6$
 $-4x - 9y = -24$

9) $-10x + 9y = -29$
 $-9x + 3y = -21$

10) $-3x - 18y = 18$
 $6x + 9y = -9$

Solve each system by substitution.

11) $y = -2x + 8$
 $y = 2x - 24$

12) $y = -2x - 1$
 $y = -3x - 4$

13) $y = 3x - 16$
 $y = -6x + 11$

14) $y = 8x + 24$
 $y = x + 3$

15) $y = 3x + 17$
 $y = -8x - 16$

16) $y = 4x - 5$
 $y = 7x - 8$

17) $y = -6x - 10$
 $y = -5x - 8$

18) $y = -5x + 23$
 $y = 5x - 7$

19) $y = x - 2$
 $y = 6x + 3$

20) $y = 2x + 6$
 $y = -2x - 2$

21) $4x + 2y = 16$
 $y = 2$

22) $y = x + 1$
 $2x - 2y = -2$

23) $y = -3$
 $-7x - 4y = -23$

24) $-6x - 7y = -15$
 $y = -2x + 1$

25) $8x + 4y = 16$
 $y = -4x + 2$

26) $y = 1$
 $3x - 5y = -20$

27) $y = 7x - 7$
 $-6x + 6y = -6$

28) $2x + 8y = 22$
 $y = 4$

29) $-4x - 2y = -16$
 $y = 2$

30) $y = 8x - 4$
 $-7x + 7y = 21$

Answers to SYSTEMS OF LINEAR EQUATIONS

- | | | | |
|----------------|----------------------------------|----------------|---------------|
| 1) No solution | 2) $(-2, 1)$ | 3) $(-1, -2)$ | 4) $(0, 10)$ |
| 5) $(-8, -8)$ | 6) $(-4, 0)$ | 7) $(-9, -9)$ | 8) $(6, 0)$ |
| 9) $(2, -1)$ | 10) $(0, -1)$ | 11) $(8, -8)$ | 12) $(-3, 5)$ |
| 13) $(3, -7)$ | 14) $(-3, 0)$ | 15) $(-3, 8)$ | 16) $(1, -1)$ |
| 17) $(-2, 2)$ | 18) $(3, 8)$ | 19) $(-1, -3)$ | 20) $(-2, 2)$ |
| 21) $(3, 2)$ | 22) Infinite number of solutions | 23) $(5, -3)$ | |
| 24) $(-1, 3)$ | 25) $(-1, 6)$ | 26) $(-5, 1)$ | 27) $(1, 0)$ |
| 28) $(-5, 4)$ | 29) $(3, 2)$ | 30) $(1, 4)$ | |