

Assignment

Solve each system by substitution.

$$\begin{aligned} 1) \quad & -2x - 4y = -16 \\ & 6x - 2y = 20 \end{aligned}$$

$$\begin{aligned} 2) \quad & 5x + 2y = 20 \\ & 6x + 5y = 24 \end{aligned}$$

$$\begin{aligned} 3) \quad & -2x - 2y = 20 \\ & 7x - 6y = -5 \end{aligned}$$

$$\begin{aligned} 4) \quad & 5x - 2y = 5 \\ & -8x - 6y = -8 \end{aligned}$$

$$\begin{aligned} 5) \quad & -3x - 6y = 24 \\ & -3x + 6y = -12 \end{aligned}$$

$$\begin{aligned} 6) \quad & -4x - 2y = 0 \\ & y = 6 \end{aligned}$$

$$\begin{aligned} 7) \quad & y = -1 \\ & 5x - 4y = -6 \end{aligned}$$

$$\begin{aligned} 8) \quad & 4x - 3y = 3 \\ & 6x - y = 1 \end{aligned}$$

$$\begin{aligned} 9) \quad & 4x - 3y = 10 \\ & -2x + 3y = -14 \end{aligned}$$

$$\begin{aligned} 10) \quad & 6x + 2y = -14 \\ & 8x - 4y = 8 \end{aligned}$$

$$\begin{aligned} 11) \quad & -4x - 8y = -12 \\ & y = 4 \end{aligned}$$

$$\begin{aligned} 12) \quad & 3x - 7y = 9 \\ & -x - 3y = 13 \end{aligned}$$

$$\begin{aligned} 13) \quad & y = 5 \\ & 3x + 7y = 14 \end{aligned}$$

$$\begin{aligned} 14) \quad & 5x + 5y = 5 \\ & -2x + 5y = -16 \end{aligned}$$

$$\begin{aligned} 15) \quad & 2x + 3y = 8 \\ & 2x - 6y = -10 \end{aligned}$$

$$\begin{aligned} 16) \quad & -x + 6y = -5 \\ & 4x + 3y = 20 \end{aligned}$$

$$\begin{aligned} 17) \quad & -x + 3y = -16 \\ & 2x - 4y = 24 \end{aligned}$$

$$\begin{aligned} 18) \quad & -6x - 3y = 6 \\ & -12x - 6y = -2 \end{aligned}$$

$$\begin{aligned} 19) \quad & -2x - 5y = 22 \\ & -x - 5y = 21 \end{aligned}$$

$$\begin{aligned} 20) \quad & -3x - 2y = -5 \\ & 6x + 3y = 3 \end{aligned}$$

$$\begin{aligned} 21) \quad & 3x - 4y = -23 \\ & y = 2 \end{aligned}$$

$$\begin{aligned} 22) \quad & -4x + 4y = 12 \\ & -2x + 6y = -14 \end{aligned}$$

$$\begin{aligned} 23) \quad & -x - y = -7 \\ & x + y = 7 \end{aligned}$$

$$\begin{aligned} 24) \quad & -6x + 2y = 12 \\ & 8x + 7y = -16 \end{aligned}$$



Answers to Assignment (ID: 1)

1) (4, 2)

5) (-2, -3)

9) (-2, -6)

13) (-7, 5)

17) (4, -4)

21) (-5, 2)

24) (-2, 0)

2) (4, 0)

6) (-3, 6)

10) (-1, -4)

14) (3, -2)

18) No solution

22) (-8, -5)

3) (-5, -5)

7) (-2, -1)

11) (-5, 4)

15) (1, 2)

19) (-1, -4)

23) Infinite number of solutions

4) (1, 0)

8) (0, -1)

12) (-4, -3)

16) (5, 0)

20) (-3, 7)



Assignment

Solve each system by substitution.

$$\begin{aligned} 1) \quad & 5x + 3y = 8 \\ & -15x - 9y = -3 \end{aligned}$$

$$\begin{aligned} 2) \quad & 4x - 8y = -20 \\ & 5x - 2y = -17 \end{aligned}$$

$$\begin{aligned} 3) \quad & -2x - 6y = -4 \\ & -4x - 8y = -4 \end{aligned}$$

$$\begin{aligned} 4) \quad & 4x - 8y = -12 \\ & -4x + 8y = 12 \end{aligned}$$

$$\begin{aligned} 5) \quad & 2x - 7y = -1 \\ & 6x - y = -23 \end{aligned}$$

$$\begin{aligned} 6) \quad & -6x + 7y = 12 \\ & -4x + 3y = 8 \end{aligned}$$

$$\begin{aligned} 7) \quad & -7x + 4y = 10 \\ & 8x + 5y = -21 \end{aligned}$$

$$\begin{aligned} 8) \quad & 5x + 3y = -23 \\ & 3x - 3y = -9 \end{aligned}$$

$$\begin{aligned} 9) \quad & -8x + 6y = -4 \\ & 5x - 8y = 11 \end{aligned}$$

$$\begin{aligned} 10) \quad & -2x + 3y = -6 \\ & -2x - 3y = -6 \end{aligned}$$

$$\begin{aligned} 11) \quad & 5x + 5y = 0 \\ & -3x - 7y = -16 \end{aligned}$$

$$\begin{aligned} 12) \quad & -3x - y = 12 \\ & y = -3 \end{aligned}$$

$$\begin{aligned} 13) \quad & y = -2 \\ & 5x - 6y = -8 \end{aligned}$$

$$\begin{aligned} 14) \quad & 2x - 4y = -3 \\ & -4x + 8y = 2 \end{aligned}$$

$$\begin{aligned} 15) \quad & 4x + 7y = 16 \\ & y = 0 \end{aligned}$$

$$\begin{aligned} 16) \quad & 4x - 6y = 20 \\ & y = -4 \end{aligned}$$

$$\begin{aligned} 17) \quad & 2x - y = 2 \\ & -6x + 2y = -10 \end{aligned}$$

$$\begin{aligned} 18) \quad & 3x + 2y = 19 \\ & y = 8 \end{aligned}$$

$$\begin{aligned} 19) \quad & y = -5 \\ & -3x + 5y = -7 \end{aligned}$$

$$\begin{aligned} 20) \quad & -6x + 3y = -6 \\ & y = -8 \end{aligned}$$

$$\begin{aligned} 21) \quad & -8x + 2y = 6 \\ & -7x + 3y = 14 \end{aligned}$$

$$\begin{aligned} 22) \quad & -6x - 2y = 22 \\ & 4x + 6y = 4 \end{aligned}$$

$$\begin{aligned} 23) \quad & -3x + 2y = 4 \\ & 7x + 3y = 6 \end{aligned}$$

$$\begin{aligned} 24) \quad & -5x + 3y = -6 \\ & 5x - 3y = -2 \end{aligned}$$



Answers to Assignment (ID: 2)

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



Assignment

Solve each system by substitution.

$$1) \begin{cases} y = 8 \\ -3x + 3y = 18 \end{cases}$$

$$2) \begin{cases} 6x + 3y = -24 \\ -3x - 4y = -8 \end{cases}$$

$$3) \begin{cases} -x - 7y = -13 \\ -4x - 7y = 11 \end{cases}$$

$$4) \begin{cases} -5x - 4y = 5 \\ 3x + 4y = -3 \end{cases}$$

$$5) \begin{cases} -7x + 6y = 8 \\ -5x + 5y = 0 \end{cases}$$

$$6) \begin{cases} -5x - 5y = 10 \\ 5x - y = 14 \end{cases}$$

$$7) \begin{cases} -5x - 3y = 8 \\ -7x + 6y = 1 \end{cases}$$

$$8) \begin{cases} 5x - 7y = -16 \\ y = 8 \end{cases}$$

$$9) \begin{cases} 6x - 3y = 6 \\ -7x - 2y = -18 \end{cases}$$

$$10) \begin{cases} -2x + 8y = -2 \\ 6x - 7y = 23 \end{cases}$$

$$11) \begin{cases} -6x - 5y = -1 \\ -12x - 10y = -2 \end{cases}$$

$$12) \begin{cases} -2x - 3y = 14 \\ 6x - 2y = 2 \end{cases}$$

$$13) \begin{cases} 8x - 5y = -14 \\ 2x - 4y = 2 \end{cases}$$

$$14) \begin{cases} -3x - 7y = 9 \\ -6x - 14y = 18 \end{cases}$$

$$15) \begin{cases} -6x + 4y = -6 \\ -2x + 7y = -2 \end{cases}$$

$$16) \begin{cases} 8x - 8y = 8 \\ 6x - 7y = 10 \end{cases}$$

$$17) \begin{cases} -5x - 6y = 18 \\ 5x + 4y = -2 \end{cases}$$

$$18) \begin{cases} y = 4 \\ -2x - 5y = -10 \end{cases}$$

$$19) \begin{cases} y = 4 \\ -4x + 3y = 20 \end{cases}$$

$$20) \begin{cases} y = -1 \\ 5x + 5y = 10 \end{cases}$$

$$21) \begin{cases} 4x + 3y = -5 \\ y = -3 \end{cases}$$

$$22) \begin{cases} -3x - 7y = -23 \\ 3x - 4y = 1 \end{cases}$$

$$23) \begin{cases} 2x + 8y = 8 \\ -5x - 7y = -20 \end{cases}$$

$$24) \begin{cases} -3x - 4y = -5 \\ 9x + 12y = -7 \end{cases}$$



Answers to Assignment (ID: 3)

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



Assignment

Solve each system by substitution.

1) $5x + 6y = 19$
 $6x - 4y = -22$

2) $2x - 3y = 11$
 $-7x + 6y = -16$

3) $5x + 5y = 5$
 $-4x + 6y = -4$

4) $5x + 2y = 15$
 $6x - 2y = -4$

5) $3x - 8y = 14$
 $-7x + 2y = -16$

6) $2x - 6y = -2$
 $5x - y = -19$

7) $-4x - 4y = -16$
 $-7x + 6y = -15$

8) $6x - 3y = 0$
 $-7x + 5y = -12$

9) $y = 1$
 $2x + 6y = 16$

10) $2x + 2y = 6$
 $-4x - 7y = -9$

11) $-4x + 5y = -17$
 $2x - 4y = 16$

12) $6x - 2y = -16$
 $3x + 2y = -20$

13) $4x - 3y = 1$
 $-2x - 5y = 19$

14) $3x - y = -8$
 $6x + 3y = -21$

15) $-6x - y = 14$
 $3x - 2y = -17$

16) $6x + 6y = -12$
 $2x - y = 17$

17) $-8x - 3y = 3$
 $16x + 6y = 6$

18) $-7x - 2y = -20$
 $5x + 8y = -12$

19) $-7x + 4y = -2$
 $-5x - 2y = 18$

20) $4x + 7y = 1$
 $7x - y = 15$

21) $-2x - 5y = 1$
 $5x - 8y = 18$

22) $-x + 5y = 7$
 $-3x - 4y = -17$

23) $3x - y = -16$
 $8x + 2y = -10$

24) $-3x - 2y = 11$
 $-3x - 4y = 1$



Answers to Assignment (ID: 4)

1) $(-1, 4)$

5) $(2, -1)$

9) $(5, 1)$

13) $(-2, -3)$

17) No solution

21) $(2, -1)$

2) $(-2, -5)$

6) $(-4, -1)$

10) $(4, -1)$

14) $(-3, -1)$

18) $(4, -4)$

22) $(3, 2)$

3) $(1, 0)$

7) $(3, 1)$

11) $(-2, -5)$

15) $(-3, 4)$

19) $(-2, -4)$

23) $(-3, 7)$

4) $(1, 5)$

8) $(-4, -8)$

12) $(-4, -4)$

16) $(5, -7)$

20) $(2, -1)$

24) $(-7, 5)$



Assignment

Solve each system by substitution.

$$\begin{aligned} 1) \quad & -2x + 8y = 10 \\ & -x - 6y = -15 \end{aligned}$$

$$\begin{aligned} 2) \quad & -5x + 3y = -12 \\ & -x + 3y = 0 \end{aligned}$$

$$\begin{aligned} 3) \quad & -4x + 4y = -24 \\ & -8x - y = -12 \end{aligned}$$

$$\begin{aligned} 4) \quad & 8x - 4y = 8 \\ & -7x + 3y = -10 \end{aligned}$$

$$\begin{aligned} 5) \quad & -8x - 4y = -20 \\ & 3x + 4y = 0 \end{aligned}$$

$$\begin{aligned} 6) \quad & 5x + 8y = 22 \\ & 2x - 5y = 17 \end{aligned}$$

$$\begin{aligned} 7) \quad & -8x - y = -12 \\ & -5x - 3y = -17 \end{aligned}$$

$$\begin{aligned} 8) \quad & -3x + 5y = 14 \\ & -5x + 7y = 22 \end{aligned}$$

$$\begin{aligned} 9) \quad & 2x + 5y = -12 \\ & 2x + 2y = -6 \end{aligned}$$

$$\begin{aligned} 10) \quad & -x + 6y = -22 \\ & y = -4 \end{aligned}$$

$$\begin{aligned} 11) \quad & 2x - 3y = 3 \\ & -7x + 7y = 0 \end{aligned}$$

$$\begin{aligned} 12) \quad & 8x + 4y = -16 \\ & -x - 4y = 23 \end{aligned}$$

$$\begin{aligned} 13) \quad & 4x + 5y = -7 \\ & -5x + 5y = 20 \end{aligned}$$

$$\begin{aligned} 14) \quad & 2x - y = 10 \\ & -5x - 3y = 8 \end{aligned}$$

$$\begin{aligned} 15) \quad & 8x - 16y = 1 \\ & 4x - 8y = 2 \end{aligned}$$

$$\begin{aligned} 16) \quad & 2x + 2y = -12 \\ & 2x + 8y = -6 \end{aligned}$$

$$\begin{aligned} 17) \quad & y = -4 \\ & -2x + 7y = -24 \end{aligned}$$

$$\begin{aligned} 18) \quad & -2x - 8y = -10 \\ & -2x - 2y = 2 \end{aligned}$$

$$\begin{aligned} 19) \quad & 8x - 6y = -18 \\ & 6x - 4y = -16 \end{aligned}$$

$$\begin{aligned} 20) \quad & 4x - 2y = 18 \\ & -3x - 5y = -7 \end{aligned}$$

$$\begin{aligned} 21) \quad & 6x - 8y = 2 \\ & -18x + 24y = 6 \end{aligned}$$

$$\begin{aligned} 22) \quad & -3x - 2y = -16 \\ & 2x + 6y = 20 \end{aligned}$$

$$\begin{aligned} 23) \quad & 5x + 8y = -16 \\ & 3x + 2y = 10 \end{aligned}$$

$$\begin{aligned} 24) \quad & -12x + 14y = -2 \\ & 6x - 7y = 1 \end{aligned}$$



Answers to Assignment (ID: 5)

1) (3, 2)

2) (3, 1)

3) (2, -4)

4) (4, 6)

5) (4, -3)

6) (6, -1)

7) (1, 4)

8) (-3, 1)

9) (-1, -2)

10) (-2, -4)

11) (-3, -3)

12) (1, -6)

13) (-3, 1)

14) (2, -6)

15) No solution

16) (-7, 1)

17) (-2, -4)

18) (-3, 2)

19) (-6, -5)

20) (4, -1)

21) No solution

22) (4, 2)

23) (8, -7)

24) Infinite number of solutions



Assignment

Solve each system by substitution.

$$\begin{aligned} 1) \quad & -2x - 3y = 3 \\ & -2x - 7y = -1 \end{aligned}$$

$$\begin{aligned} 2) \quad & 3x + 2y = -3 \\ & -x + 3y = -10 \end{aligned}$$

$$\begin{aligned} 3) \quad & 4x + 5y = -6 \\ & -6x + 7y = -20 \end{aligned}$$

$$\begin{aligned} 4) \quad & -3x + 2y = 5 \\ & 8x - 5y = -13 \end{aligned}$$

$$\begin{aligned} 5) \quad & -x + 6y = 1 \\ & -x + 5y = 2 \end{aligned}$$

$$\begin{aligned} 6) \quad & -2x - 6y = -14 \\ & 5x + 7y = -5 \end{aligned}$$

$$\begin{aligned} 7) \quad & y = 0 \\ & -3x + 2y = 12 \end{aligned}$$

$$\begin{aligned} 8) \quad & 5x + 3y = -19 \\ & y = 7 \end{aligned}$$

$$\begin{aligned} 9) \quad & -3x + 3y = -12 \\ & 3x - 3y = 12 \end{aligned}$$

$$\begin{aligned} 10) \quad & y = 1 \\ & 4x + 2y = -2 \end{aligned}$$

$$\begin{aligned} 11) \quad & -x + 3y = -7 \\ & 3x - 3y = 9 \end{aligned}$$

$$\begin{aligned} 12) \quad & 6x + 5y = 14 \\ & -5x - y = -18 \end{aligned}$$

$$\begin{aligned} 13) \quad & 6x + 6y = -24 \\ & -2x + 2y = -8 \end{aligned}$$

$$\begin{aligned} 14) \quad & 6x + 3y = 0 \\ & 2x - 3y = 16 \end{aligned}$$

$$\begin{aligned} 15) \quad & -3x + 4y = 9 \\ & -6x - 3y = 18 \end{aligned}$$

$$\begin{aligned} 16) \quad & 7x - 2y = 11 \\ & -8x + 7y = -22 \end{aligned}$$

$$\begin{aligned} 17) \quad & 7x + 5y = -5 \\ & -3x - 2y = 2 \end{aligned}$$

$$\begin{aligned} 18) \quad & -3x - 5y = -8 \\ & 7x + 5y = -8 \end{aligned}$$

$$\begin{aligned} 19) \quad & -4x - 8y = -12 \\ & -3x - 3y = -3 \end{aligned}$$

$$\begin{aligned} 20) \quad & 5x - y = 15 \\ & 7x - 7y = -7 \end{aligned}$$

$$\begin{aligned} 21) \quad & -4x - 2y = 0 \\ & 6x - 5y = 16 \end{aligned}$$

$$\begin{aligned} 22) \quad & -6x - 6y = -18 \\ & -7x + 8y = -21 \end{aligned}$$

$$\begin{aligned} 23) \quad & 4x + 3y = 12 \\ & y = 0 \end{aligned}$$

$$\begin{aligned} 24) \quad & -4x - 3y = -4 \\ & 5x + 2y = 12 \end{aligned}$$



Answers to Assignment (ID: 6)

1) $(-3, 1)$

2) $(1, -3)$

3) $(1, -2)$

4) $(-1, 1)$

5) $(-7, -1)$

6) $(-8, 5)$

7) $(-4, 0)$

8) $(-8, 7)$

9) Infinite number of solutions

10) $(-1, 1)$

11) $(1, -2)$

12) $(4, -2)$

13) $(0, -4)$

14) $(2, -4)$

15) $(-3, 0)$

16) $(1, -2)$

17) $(0, -1)$

18) $(-4, 4)$

19) $(-1, 2)$

20) $(4, 5)$

21) $(1, -2)$

22) $(3, 0)$

23) $(3, 0)$

24) $(4, -4)$



Assignment

Solve each system by substitution.

$$\begin{aligned} 1) \quad & 7x - 4y = -13 \\ & -8x + 3y = 18 \end{aligned}$$

$$\begin{aligned} 2) \quad & -5x + 7y = -9 \\ & 6x - 7y = 15 \end{aligned}$$

$$\begin{aligned} 3) \quad & -3x + 7y = 17 \\ & y = 5 \end{aligned}$$

$$\begin{aligned} 4) \quad & 4x + 6y = -30 \\ & -2x - 3y = 15 \end{aligned}$$

$$\begin{aligned} 5) \quad & -6x + 3y = 1 \\ & -18x + 9y = 4 \end{aligned}$$

$$\begin{aligned} 6) \quad & y = 3 \\ & 5x - 7y = -6 \end{aligned}$$

$$\begin{aligned} 7) \quad & -6x + 5y = 8 \\ & -2x - 6y = 18 \end{aligned}$$

$$\begin{aligned} 8) \quad & y = -2 \\ & 3x - 2y = -14 \end{aligned}$$

$$\begin{aligned} 9) \quad & 6x - y = -17 \\ & -18x + 3y = 51 \end{aligned}$$

$$\begin{aligned} 10) \quad & 2x + 2y = -2 \\ & -5x - y = -11 \end{aligned}$$

$$\begin{aligned} 11) \quad & 2x - y = -24 \\ & 6x + 3y = -24 \end{aligned}$$

$$\begin{aligned} 12) \quad & -2x + 2y = 10 \\ & 5x + 7y = 23 \end{aligned}$$

$$\begin{aligned} 13) \quad & y = 3 \\ & 7x - 4y = -12 \end{aligned}$$

$$\begin{aligned} 14) \quad & y = 2 \\ & 4x + 3y = 18 \end{aligned}$$

$$\begin{aligned} 15) \quad & 8x + 3y = -6 \\ & -16x - 6y = 1 \end{aligned}$$

$$\begin{aligned} 16) \quad & 3x - y = -9 \\ & 9x - 3y = -27 \end{aligned}$$

$$\begin{aligned} 17) \quad & 4x - 5y = -18 \\ & -8x - 8y = 0 \end{aligned}$$

$$\begin{aligned} 18) \quad & -4x + 4y = 0 \\ & -8x + 8y = 0 \end{aligned}$$

$$\begin{aligned} 19) \quad & 8x - 4y = -24 \\ & 3x - 7y = 13 \end{aligned}$$

$$\begin{aligned} 20) \quad & -7x + 3y = -12 \\ & -x + 3y = -12 \end{aligned}$$

$$\begin{aligned} 21) \quad & -3x + 2y = -6 \\ & y = 6 \end{aligned}$$

$$\begin{aligned} 22) \quad & 8x + 7y = 6 \\ & -5x - y = 3 \end{aligned}$$

$$\begin{aligned} 23) \quad & -6x + 5y = 18 \\ & y = 0 \end{aligned}$$

$$\begin{aligned} 24) \quad & 5x - 7y = 5 \\ & -7x - 3y = -7 \end{aligned}$$



Answers to Assignment (ID: 7)

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



Assignment

Solve each system by substitution.

$$\begin{aligned} 1) \quad & 8x - 6y = -6 \\ & -4x - 2y = -22 \end{aligned}$$

$$\begin{aligned} 2) \quad & -7x - 3y = 15 \\ & -3x - 4y = 1 \end{aligned}$$

$$\begin{aligned} 3) \quad & -6x + 5y = 5 \\ & 3x - 7y = 20 \end{aligned}$$

$$\begin{aligned} 4) \quad & -3x - 4y = -23 \\ & -8x - y = 16 \end{aligned}$$

$$\begin{aligned} 5) \quad & -4x + 4y = 4 \\ & -8x + 5y = -16 \end{aligned}$$

$$\begin{aligned} 6) \quad & -3x - 4y = -10 \\ & -2x + 7y = 3 \end{aligned}$$

$$\begin{aligned} 7) \quad & -8x - 7y = -14 \\ & 3x + 4y = 8 \end{aligned}$$

$$\begin{aligned} 8) \quad & -4x + 5y = 18 \\ & -4x + 3y = 22 \end{aligned}$$

$$\begin{aligned} 9) \quad & -3x - 3y = 0 \\ & -5x - 6y = 5 \end{aligned}$$

$$\begin{aligned} 10) \quad & -4x - 3y = 1 \\ & 6x + 2y = 6 \end{aligned}$$

$$\begin{aligned} 11) \quad & -2x - 8y = 4 \\ & 4x + 2y = 6 \end{aligned}$$

$$\begin{aligned} 12) \quad & -4x - 3y = -4 \\ & 6x - y = -16 \end{aligned}$$

$$\begin{aligned} 13) \quad & 7x + 3y = 0 \\ & -2x - 2y = -8 \end{aligned}$$

$$\begin{aligned} 14) \quad & 5x - 5y = 5 \\ & -8x + 2y = 4 \end{aligned}$$

$$\begin{aligned} 15) \quad & -8x + 5y = 3 \\ & -8x - 8y = 16 \end{aligned}$$

$$\begin{aligned} 16) \quad & -2x - 6y = 8 \\ & y = -3 \end{aligned}$$

$$\begin{aligned} 17) \quad & -8x - 6y = 1 \\ & 16x + 12y = 7 \end{aligned}$$

$$\begin{aligned} 18) \quad & -4x - y = -18 \\ & -x - 2y = -8 \end{aligned}$$

$$\begin{aligned} 19) \quad & 3x + 4y = 19 \\ & -2x - y = -6 \end{aligned}$$

$$\begin{aligned} 20) \quad & -4x - 7y = 21 \\ & -8x - 7y = 21 \end{aligned}$$

$$\begin{aligned} 21) \quad & -5x - 7y = 5 \\ & -6x - 7y = 13 \end{aligned}$$

$$\begin{aligned} 22) \quad & -7x + 6y = -17 \\ & -x + 3y = 4 \end{aligned}$$

$$\begin{aligned} 23) \quad & 3x + 5y = -3 \\ & y = 3 \end{aligned}$$

$$\begin{aligned} 24) \quad & -2x + 8y = -18 \\ & y = -2 \end{aligned}$$



Answers to Assignment (ID: 8)

1) (3, 5)

2) (-3, 2)

3) (-5, -5)

4) (-3, 8)

5) (7, 8)

6) (2, 1)

7) (0, 2)

8) (-7, -2)

9) (5, -5)

10) (2, -3)

11) (2, -1)

12) (-2, 4)

13) (-3, 7)

14) (-1, -2)

15) (-1, -1)

16) (5, -3)

17) No solution

18) (4, 2)

19) (1, 4)

20) (0, -3)

21) (-8, 5)

22) (5, 3)

23) (-6, 3)

24) (1, -2)



Assignment

Solve each system by substitution.

$$\begin{aligned} 1) \quad & -2x + 4y = -14 \\ & 5x - y = 8 \end{aligned}$$

$$\begin{aligned} 2) \quad & -2x + 4y = 16 \\ & 2x - 4y = -16 \end{aligned}$$

$$\begin{aligned} 3) \quad & 6x - 3y = 6 \\ & -8x - y = -18 \end{aligned}$$

$$\begin{aligned} 4) \quad & 3x - y = 11 \\ & 4x - 2y = 18 \end{aligned}$$

$$\begin{aligned} 5) \quad & 5x - 3y = -17 \\ & -8x + 6y = 20 \end{aligned}$$

$$\begin{aligned} 6) \quad & -3x + 3y = 21 \\ & 3x + 7y = 19 \end{aligned}$$

$$\begin{aligned} 7) \quad & -2x - 3y = 2 \\ & -6x - 7y = 2 \end{aligned}$$

$$\begin{aligned} 8) \quad & 3x + 2y = 3 \\ & 7x + 4y = 11 \end{aligned}$$

$$\begin{aligned} 9) \quad & 7x + 5y = 2 \\ & 8x - 8y = 16 \end{aligned}$$

$$\begin{aligned} 10) \quad & 7x - 4y = -21 \\ & 7x + 3y = -21 \end{aligned}$$

$$\begin{aligned} 11) \quad & -4x + 8y = 0 \\ & 5x - 4y = -6 \end{aligned}$$

$$\begin{aligned} 12) \quad & -4x + 3y = 12 \\ & -5x - 3y = -12 \end{aligned}$$

$$\begin{aligned} 13) \quad & -4x + 8y = -4 \\ & 3x - 4y = 5 \end{aligned}$$

$$\begin{aligned} 14) \quad & -4x - 7y = 14 \\ & 5x - 3y = 6 \end{aligned}$$

$$\begin{aligned} 15) \quad & -8x - 6y = 6 \\ & 4x + 6y = -6 \end{aligned}$$

$$\begin{aligned} 16) \quad & -4x - y = 3 \\ & 4x - 8y = -12 \end{aligned}$$

$$\begin{aligned} 17) \quad & 3x + 5y = 7 \\ & -8x + 4y = 16 \end{aligned}$$

$$\begin{aligned} 18) \quad & -3x + 4y = 18 \\ & -7x + 2y = -2 \end{aligned}$$

$$\begin{aligned} 19) \quad & 4x - 2y = 8 \\ & 7x - 6y = -1 \end{aligned}$$

$$\begin{aligned} 20) \quad & -x + 2y = 8 \\ & -x - 4y = 8 \end{aligned}$$

$$\begin{aligned} 21) \quad & -2x - 3y = 10 \\ & -6x + 6y = 0 \end{aligned}$$

$$\begin{aligned} 22) \quad & 5x + 6y = -24 \\ & -x + 6y = -24 \end{aligned}$$

$$\begin{aligned} 23) \quad & -6x - 7y = 18 \\ & 2x + 8y = -6 \end{aligned}$$

$$\begin{aligned} 24) \quad & -x + 7y = 16 \\ & 5x - 8y = 1 \end{aligned}$$



Answers to Assignment (ID: 9)

1) $(1, -3)$

4) $(2, -5)$

8) $(5, -6)$

12) $(0, 4)$

16) $(-1, 1)$

20) $(-8, 0)$

24) $(5, 3)$

2) Infinite number of solutions

5) $(-7, -6)$

9) $(1, -1)$

13) $(3, 1)$

17) $(-1, 2)$

21) $(-2, -2)$

3) $(2, 2)$

6) $(-3, 4)$

10) $(-3, 0)$

14) $(0, -2)$

18) $(2, 6)$

22) $(0, -4)$

7) $(2, -2)$

11) $(-2, -1)$

15) $(0, -1)$

19) $(5, 6)$

23) $(-3, 0)$



Assignment

Solve each system by substitution.

$$\begin{aligned} 1) \quad & -6x + 5y = -20 \\ & -3x + 4y = -16 \end{aligned}$$

$$\begin{aligned} 2) \quad & 4x + 6y = 6 \\ & -7x + 2y = 2 \end{aligned}$$

$$\begin{aligned} 3) \quad & 5x + 8y = -19 \\ & -3x - y = 0 \end{aligned}$$

$$\begin{aligned} 4) \quad & 5x - 7y = -16 \\ & -3x - 6y = -21 \end{aligned}$$

$$\begin{aligned} 5) \quad & -5x + 7y = 12 \\ & 7x - 5y = -12 \end{aligned}$$

$$\begin{aligned} 6) \quad & -9x + 6y = -3 \\ & -3x + 2y = 1 \end{aligned}$$

$$\begin{aligned} 7) \quad & -x + 5y = 13 \\ & 3x - 4y = -17 \end{aligned}$$

$$\begin{aligned} 8) \quad & -5x - 4y = 6 \\ & -4x - 8y = -24 \end{aligned}$$

$$\begin{aligned} 9) \quad & -7x - 6y = -23 \\ & 2x - 2y = 14 \end{aligned}$$

$$\begin{aligned} 10) \quad & 5x + 3y = 3 \\ & -7x - 6y = -6 \end{aligned}$$

$$\begin{aligned} 11) \quad & 4x + 8y = 40 \\ & 2x + 4y = 20 \end{aligned}$$

$$\begin{aligned} 12) \quad & -5x - y = -1 \\ & y = 1 \end{aligned}$$

$$\begin{aligned} 13) \quad & -x - 8y = -22 \\ & -5x + 4y = 22 \end{aligned}$$

$$\begin{aligned} 14) \quad & 4x - y = 3 \\ & 8x + 2y = -6 \end{aligned}$$

$$\begin{aligned} 15) \quad & 8x - 2y = 2 \\ & -8x + 4y = -4 \end{aligned}$$

$$\begin{aligned} 16) \quad & 12x - 21y = -5 \\ & -4x + 7y = -7 \end{aligned}$$

$$\begin{aligned} 17) \quad & -8x + 6y = 20 \\ & -2x - 3y = -4 \end{aligned}$$

$$\begin{aligned} 18) \quad & -4x + 4y = 16 \\ & -2x - 8y = -22 \end{aligned}$$

$$\begin{aligned} 19) \quad & -4x - 3y = 21 \\ & -2x + 2y = 14 \end{aligned}$$

$$\begin{aligned} 20) \quad & 6x - 3y = 0 \\ & 2x - 2y = -6 \end{aligned}$$

$$\begin{aligned} 21) \quad & 18x - 24y = 66 \\ & -6x + 8y = -22 \end{aligned}$$

$$\begin{aligned} 22) \quad & y = 5 \\ & -5x - 7y = 5 \end{aligned}$$

$$\begin{aligned} 23) \quad & -24x - 15y = 0 \\ & 8x + 5y = 0 \end{aligned}$$

$$\begin{aligned} 24) \quad & 4x - 6y = 6 \\ & 3x - y = 15 \end{aligned}$$



Answers to Assignment (ID: 10)

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

