System of Equations

Basic

Linear - Substitution

1. *substitution* $x + y = 8,\ x - y = -4$

2. *substitution* $3x - 4y = -30,\ 3x + 2y = 6$

3. *substitution* $-4x + 9y = 9,\ x - 3y = -6$

4. *substitution* $12x + 13y = 9,\ 15x - 23y = 6$

5. *substitution* $-2a + 3b = 14,\ a - 4b = 3$

6. *substitution* $3x - 7y = 27,\ -5x + 4y = -45$

7. *substitution* $3x - 4y = 100,\ \dfrac{x}{3} + \dfrac{4y}{3} = 100$

8. *substitution* $y = 3x - 4,\ y = \dfrac{3}{2}x - 2$

9. *substitution* $\dfrac{x}{2} - \dfrac{y}{2} = -1,\ x + 4y = -12$

10. *substitution* $\dfrac{1}{2}x + \dfrac{1}{7}y = 4,\ \dfrac{1}{6}x - \dfrac{2}{7}y = -1$

Answers

System of Equations

Basic

Linear - Substitution

1. $x = 2, y = 6$

2. $x = -2, y = 6$

3. $x = 9, y = 5$

4. $x = \dfrac{95}{157}, y = \dfrac{21}{157}$

5. $a = -13, b = -4$

6. $x = 9, y = 0$

7. $x = 100, y = 50$

8. $y = 0, x = \dfrac{4}{3}$

9. $x = -4, y = -2$

10. $x = 6, y = 7$