

Section 9.1 Extra Practice

- Solve the following systems of linear equations by substitution. Verify your answers.
 - $2x - 3y + 17 = 0$
 $y = -5x$
 - $4x + y = 1$
 $x = 2y - 20$
 - $y = -5x - 8$
 $y = 4x + 1$
- Solve the following systems of linear equations by substitution by first isolating x .
 - $x + y = 9$
 $-10x + 6y = 6$
 - $x - 3y = 4$
 $5x - 7y = 4$
 - $2x + 3y = 20$
 $6x - y = 20$
- Solve the following systems of linear equations by substitution by first isolating y .
 - $x - y = -2$
 $-2x + y = 7$
 - $-3x + y = -3$
 $5x - 2y = 10$
 - $2x + 3y = 20$
 $6x - y = 20$
- Compare your work for #2c) and 3c). Which method did you prefer for solving? Why?
- Solve the following systems of linear equations by substitution.
 - $0.4x + y = 6$
 $1.2x - 5y = 18$
 - $x + 0.03y = 10$
 $10.4x + 0.75y = 980$
 - $5x - 0.5y = 31$
 $2.5x + 3y = 9$
- Solve the following systems of linear equations by substitution.
 - $8x + y - 2 = 0$
 $3x + \frac{1}{4}y = 0$
 - $\frac{x}{2} + \frac{y}{3} = 6$
 $3x - 2y = 12$
 - $\frac{x}{6} + \frac{y}{2} = 2$
 $\frac{-x}{5} - \frac{y}{3} = 0$
- Use the following system of linear equations to complete parts a) to c):
 $2x - y = -7$
 $3x + 2y = 5$
 - Solve the system by drawing a graph.
 - Solve the system by substitution.
 - Compare your answers to parts a) and b). What is the advantage of the algebraic approach?
- Maria has a total of 20 nickels and quarters. She has four times as many nickels as quarters. How much money does Maria have?
- The perimeter of a rectangle is 48 cm. The width is one third the length. Determine the dimensions of the rectangle.
- A number is 12 less than one third of another number. Their sum is 56. What are the numbers?