

5.2 Practice A

Solve the system of linear equations by substitution. Check your solution.

1. $y = 3x - 1$

$y = x - 7$

2. $x = 5y + 2$

$x - 4y = 5$

3. The gym has a total of 25 treadmills and stationary bikes. There are 7 more stationary bikes than treadmills. Write a system of linear equations that represents this situation. How many treadmills are in the gym? How many stationary bikes are in the gym?

Solve the system of linear equations by substitution.

4. $x - y = 9$

$2x + 5y = 4$

$3x - 6y = 2$

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

6. A drawer contains 24 spoons and forks. There are three times as many spoons as forks. Write a system of linear equations that represents this situation. How many spoons are in the drawer? How many forks are in the drawer?
7. The perimeter of a rectangle is 34 centimeters. The length is two more than twice the width. Write and solve a system of linear equations to find the length and the width of the rectangle.
8. A parking lot has a total of 60 cars and trucks. The ratio of cars to trucks is 7 : 3. How many cars are in the parking lot? How many trucks are in the parking lot? Justify your answers.