

Exercise 25

Write an equation for a line parallel to $g(x) = 3x - 1$ and passing through the point $(4, 9)$.

Solution

A parallel line has the same slope as the given line: 3. Use the point-slope formula to get the equation of the line through $(4, 9)$.

$$y - 9 = 3(x - 4)$$

$$y - 9 = 3x - 12$$

$$y = 3x - 3$$