Exercise 24

Write an equation for a line parallel to $f(x) = -5x - 3$ and passing through the point $(2, -12)$.

Solution

A parallel line has the same slope as the given line: -5. Use the point-slope formula to get the equation of the line through $(2, -12)$.

$$y - (-12) = -5(x - 2)$$

$$y + 12 = -5x + 10$$

$$y = -5x - 2$$