

Exercise 4

Explain how to find a line parallel to a linear function that passes through a given point.

Solution

Use the slope of the given linear function, and use the point-slope formula to obtain the equation of the parallel line. For example, if $y = m_1x + b_1$ is given, and the equation of the parallel line through (c, d) is desired, you would write

$$y - d = m_1(x - c)$$

$$y = m_1x - cm_1 + d.$$