

Chapter 1

Functions and Graphs

Exercise Solution

Exercise 1.1.75

Instruction

For the linear equation $y = 2x - 3$, do the following tasks.

- (a) Give the slope m .
- (b) Give the y -intercept b , if any.
- (c) Graph the line.

Solution

- (a) TODO
- (b) According to the definition of y -intercept, the y -intercept of a graph is the point where it intersects the y -axis. We know that on the y -axis the x -coordinate is 0. Hence the formula to find the y -intercept of a function $y = f(x)$ is just substituting $x = 0$ and solving for y . In this case we have the y -intercept

$$y = 2 \cdot 0 - 3 = -3.$$

- (c) TODO

Answer

- (a) TODO
- (b) $b = -3$.
- (c) TODO