

Chapter 1

Basic Classes of Functions

Checkpoint Solution

Checkpoint 1.9: Finding the Slope and Equations of Lines

Instruction

Consider the line passing through points $(-3, 2)$ and $(1, 4)$.

- (a) Find the slope of the line.
- (b) Find an equation of that line in point-slope form.
- (c) Find an equation of that line in slope-intercept form.

Solution

- (a) The slope of the line is

$$m = \frac{y_2 - y_1}{x_2 - x_1} = \frac{4 - 2}{1 - (-3)} = \frac{4 - 2}{1 + 3} = \frac{2}{4} = \frac{1}{2}.$$

Answer

- (a) $m = \frac{1}{2}$