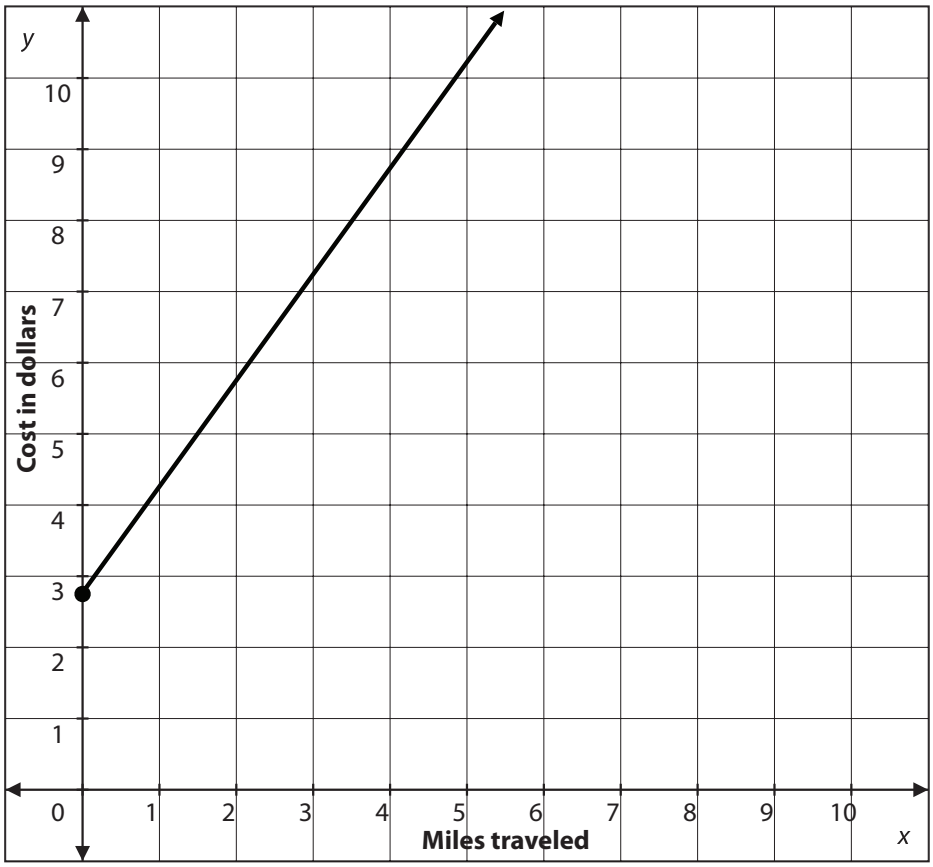
Scaffolded Practice 2.4.1

Example 1

A taxi company in Atlanta charges $2.75 per ride plus $1.50 for every mile driven. Determine the key features of this function.



1. Identify the type of function described.

2. Identify the intercepts of the graphed function.

continued

3. Determine whether the graphed function is increasing or decreasing.

4. Determine where the function is positive and negative.

5. Determine the relative minimum and maximum of the graphed function.

6. Identify the domain of the graphed function.

7. Identify any asymptotes of the graphed function.

continued

Example 2

A pendulum swings to 90% of its height on each swing and starts at a height of 80 cm. The height of the pendulum in centimeters, y, is recorded after x number of swings. Determine the key features of this function.

Number of swings (x)	Height in cm (y)
0	80
1	72
2	64.8
3	58.32
5	47.24
10	27.89
20	9.73
40	1.18
60	0.14
80	0.02

Example 3

A ringtone company charges $15 a month plus $2 for each ringtone downloaded. Create a graph and then determine the key features of this function.