Lesson 6.2.2: Analyzing Functions Fitted to Data

Georgia Standards of Excellence

MGSE9–12.S.ID.6★

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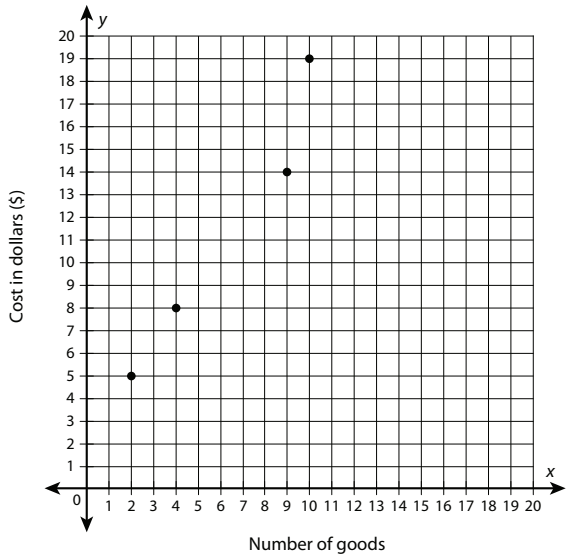
Warm-Up 6.2.2 Debrief

1. Plot each point in the table on a coordinate plane.

   To plot each point, find the value of x along the x-axis (the horizontal axis), and then find the value of y along the y-axis (the vertical axis). Let the x-axis represent the number of goods, and the y-axis represent the cost in dollars.



2. Yasin is a welder. For his job, he requires 1 hour to set up and then 3 hours for each project. The time it takes on his job to complete x projects in one day can be modeled by the function $y = 3x + 1$. Graph the function $y = 3x + 1$.

   A function of the form $y = mx + b$ is a linear function, and the graph is a line. To graph a line, find two points on the line. Evaluate the function at two values of x. Two easy values to use are 0 and 1.

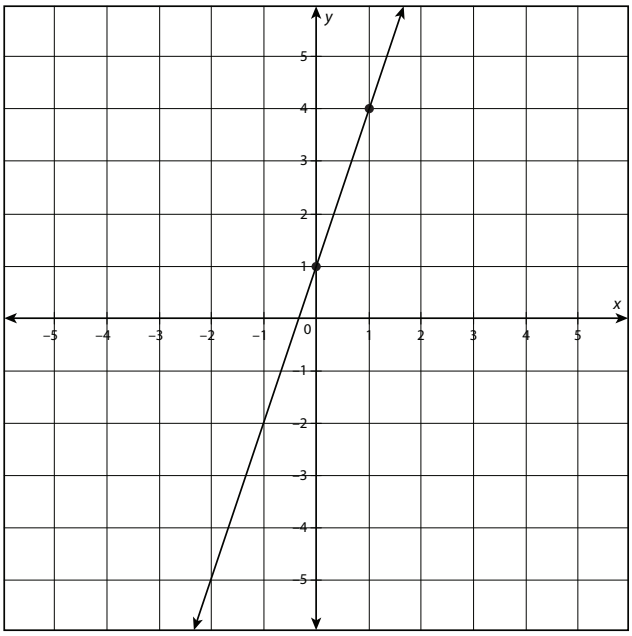
   $y = 3(0) + 1 = 1$

   $y = 3(1) + 1 = 4$

Instruction

Two points on the line are (0, 1) and (1, 4).

Graph the two points, and draw a line through the two points.



Connection to the Lesson

- In this lesson, students will examine the relationship between functions and data in a scatter plot.
- This warm-up will help students recall how to create a scatter plot given a data set.
- Students will also need to know how to graph a linear function given an algebraic equation for the function.