

## 6.2 Representing Functions

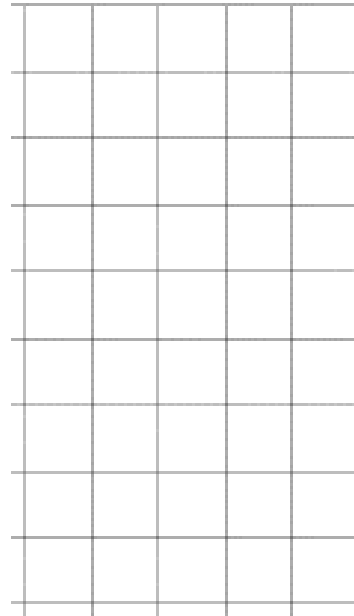
Janice plans to enroll in a Spanish class at a language school. She has to pay a registration fee of \$100 plus \$20 for each hour-long lesson she takes. The relation between the total amount she pays and the number of hours of lessons she takes is a function.

Equation

Table

Ordered Pairs

Graph



## Guided Practice

**Complete.**

- 1** A game shop rents out video games at a rate of \$6 per game. The total amount of money the shop collects,  $y$  dollars, is a function of the number of games,  $x$ , that the shop rents out.

- a) Write a verbal description of the function. Then write an algebraic equation for the function.

Total amount of money the shop collects equals product of the rental rate and the   ?.

  ? =  $6 \cdot$    ?      Write an equation.

  ? =   ?      Simplify.

- b) Construct a table of  $x$ - and  $y$ -values for the function.

<b>x</b>	1	2	3
<b>y</b>	6	<u>  ?</u>	<u>  ?</u>

In this situation, only whole numbers make sense for the input and output of the function.



- c) Use the table of values in **b)** to graph the function. Use 1 unit on the horizontal axis to represent 1 game for the  $x$  interval, and 1 unit on the vertical axis to represent \$6 for the  $y$  interval.

- 2** A fire sprinkler sprays water at a rate of 8 gallons per minute. The total amount of water being sprayed,  $y$  gallons, is a function of the number of minutes,  $x$ , that the sprinkler sprays water.