

**LESSON**  
**4-4**

**Problem Solving**  
**Graphing Functions**

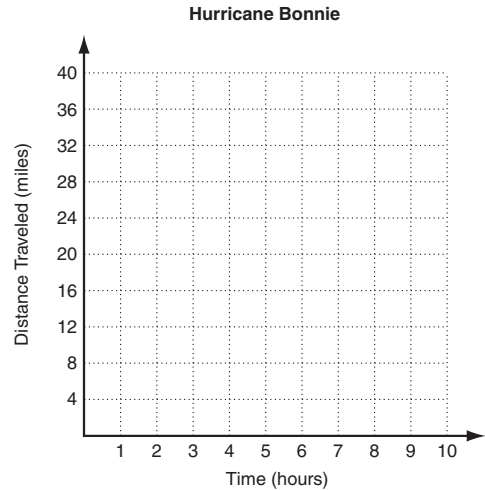
In 1998, Hurricane Bonnie approached the United States at a speed of 8 miles per hour. The function  $y = 8x$  describes how many miles  $y$  Hurricane Bonnie traveled in  $x$  hours.

1. Complete the table by generating ordered pairs.

$x$	$y = 8x$	$(x, y)$
0		
1		
2		
3		
4		

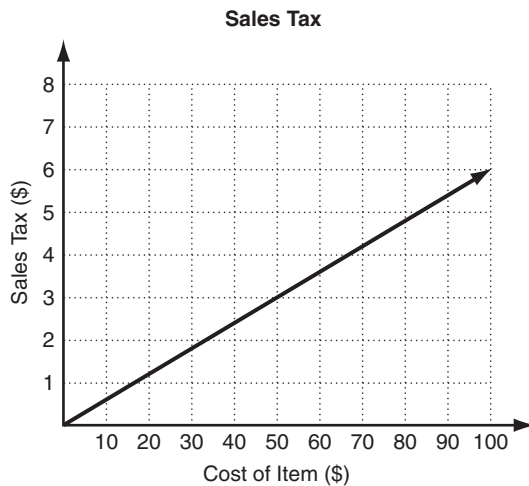
3. Use the graph to estimate how far Hurricane Bonnie traveled in 3.5 hours.
- \_\_\_\_\_

2. Graph the function  $y = 8x$ .



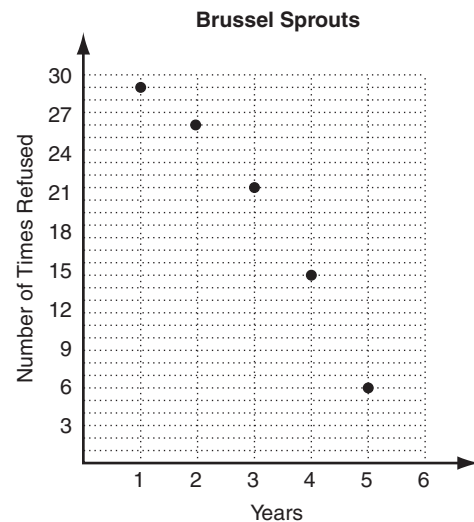
Select the correct answer.

4. The graph below shows the relation between the cost of an item and the sales tax due. Which function is graphed below?



- A**  $y = \frac{6}{x}$                       **C**  $y = \frac{x}{6}$   
**B**  $y = 0.06x$                       **D**  $y = 6x$

5. The graph below shows the relation between Jeremy's age and the number of times per year he refused to eat his brussel sprouts. Which function is graphed for the domain  $\{1, 2, 3, 4, 5\}$ ?



- F**  $y = 30 - x$                       **H**  $y = 30 - x^2$   
**G**  $y = x + 28$                       **J**  $y = 29x$