

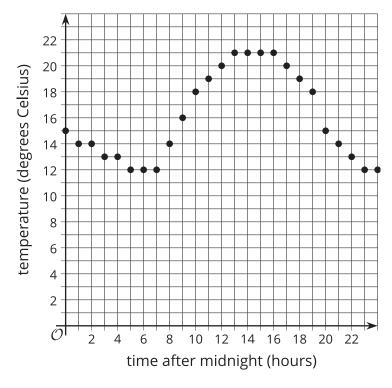
Understanding Points in Situations

Let's understand points on a function in a situation.



A Day of Temperature

The temperature for a city is a function of time after midnight. The graph shows the values on a particular spring day.



- 1. What does the point on the graph where x = 15 mean?
- 2. What is the temperature at 5 p.m.?
- 3. What is the hottest it gets on this day?
- 4. What is the coldest it gets on this day?

2.2 What Happens to -2?

For each of these equations, find the value of y when x = -2.

1.
$$y = 3x - 4$$

2.
$$y = 10 - 2x$$

3.
$$y = \frac{3}{2}x + 5$$

4.
$$y = 2(x - 1) + 4$$

5.
$$y = -x + 19$$

6.
$$y = \frac{x-3}{8}$$

7.
$$y = 0.3x + 5$$

2.3 It's Heating Up!

A sample for a science experiment is being warmed steadily in a machine. The temperature of the sample (in degrees Fahrenheit) is a function of time (in seconds) after it was put in the machine. This can be represented by the equation y = 2.1x + 86.

- 1. What does it mean when x = 2?
- 2. What is the temperature in that situation?
- 3. What does it mean when y = 122?
- 4. A graph of this equation goes through the point (60, 212). What does that mean?
- 5. Give 2 values for *x* for which the model is not expected to apply. Explain your reasoning.

6. Give 2 values for y for which the model is not expected to apply. Explain your reasoning.

