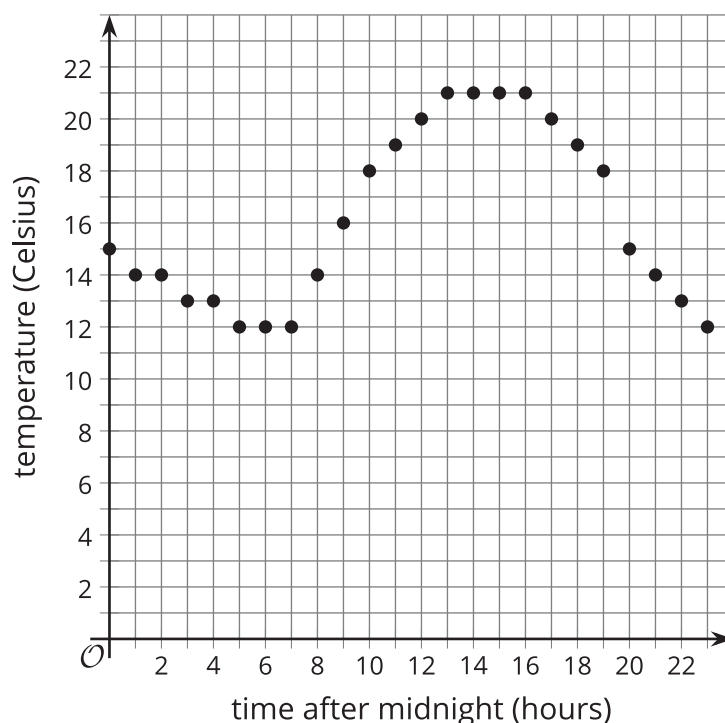


Lesson 2: Understanding Points in Situations

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

2.1: 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!

The temperature, in degrees Fahrenheit, of a scientific sample being warmed steadily as a function of time in seconds after the sample is put in a machine 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 that do not make sense. Explain your reasoning.

6. Give 2 values for y that do not make sense. Explain your reasoning.