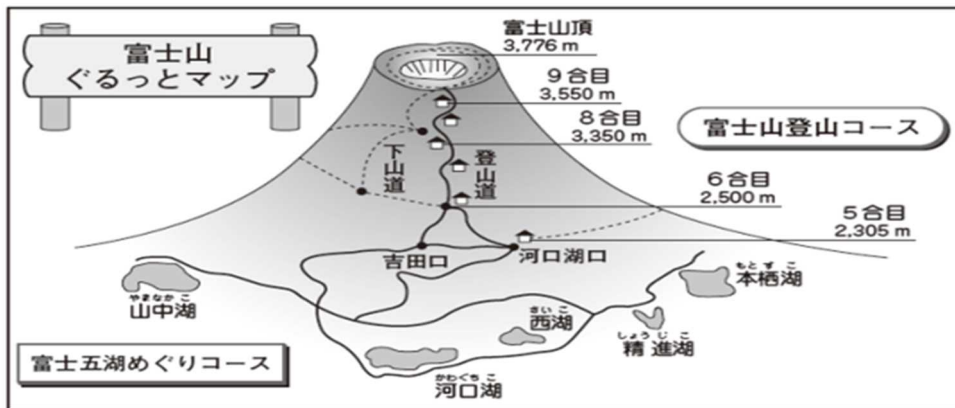


Junior high school mathematics 3

[Related to quantity] Lines from the video



A I'm looking forward to climbing Fuji in August.

B That's right. I'm looking forward to it. Let me look at the map. We are planning to start from Lake Kawaguchi and climb up to the 6th station of Mt Fuji. Have you prepared?

A I am preparing. But I haven't decided what to wear.

B It's summer in August, so I think it would be better to wear short sleeves and short trousers.

A I think it would be cold. I've heard that it gets colder when you climb a mountain.

B What would be the temperature at the sixth station?

観測所	標高(m)	平均気温(°C)	観測所	標高(m)	平均気温(°C)
A(甲府)	273	27.7	D(河口湖)	860	23.3
B(勝沼)	394	26.7	E(山中)	992	21.7
C(古関)	552	24.9	F(富士山)	3775	6.4

A I checked, but the temperature of the sixth station is not written.

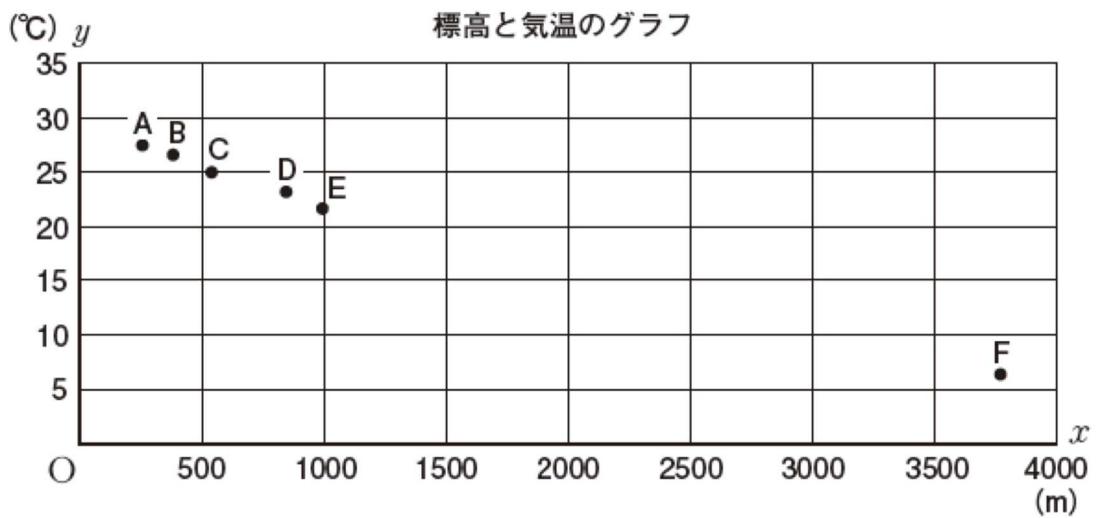
B That's true, the temperature of the sixth station is not written.

I have heard that as the height of the mountains increases, the temperature decreases at a certain rate.

A I've heard that too.

B Look at the graph. You can see that the temperature is falling little by little.

I think it would be good to connect the starting point D (Lake Kawaguchi) and F (Mt Fuji) with a line.



A If we connect D and F are by a line. . . . then it would be the graph of a linear function.

B How many metres it takes to reach at sixth station?

A It is 2500 Metres.

B 2500 metres is the X-axis ... from here you go to the Y-axis.

A If you draw a line... it's around here.

B It is about 14 degrees.

A If it's 14 degrees, it would be better to bring long sleeves.

B Short sleeves and short pants are also fine.

A I think it would be cold.

.....

Explanation:

The problem this time was to find the approximate temperature at the sixth station by using a graph based on the linear function that the temperature decreases at an almost constant rate as the height of the mountain increases.

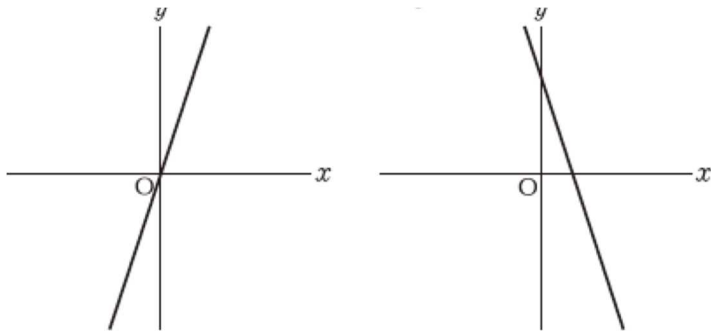
When one value changes, the other value is determined along with it.

For example, when predicting how long it will take for the water in the pool to fill up.

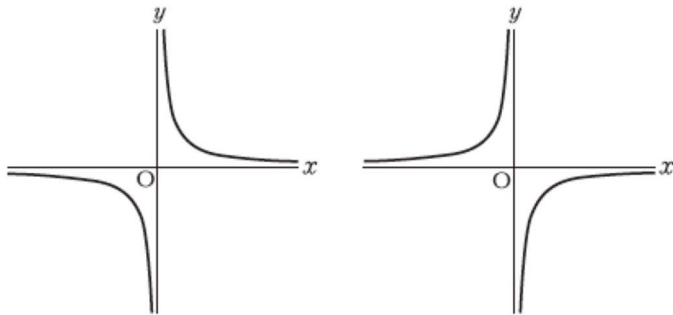
How many more hours can the mosquito coils continue to burn?

We can use it to find out about such things.

Let's think about the situations in which the concept of function is used.



Proportion



Inverse Proportion

We also learned about proportional and inverse proportional graphs. Please review the characteristics of these graphs as well.