

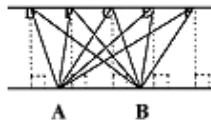


3 1/2 minutes

Public Class Work: Reviewing yesterday's problem

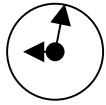
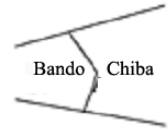
Teacher draws a diagram on chalkboard.

Teacher shows a figure on computer screen.



The triangles between two parallel lines have the same areas.

There is Bando's land. There is Chiba's land. And these two people's borderline is bent, but we want to make it straight.

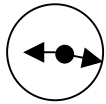


15 minutes

Private Class Work: Students work on the problem*"Try thinking about the methods of changing this shape without changing the area."*

The teacher says: "People who have come up with an idea, for now work with Mr. Ebina, and people who want to discuss it with your friends, you can do so. And for now I have placed some hint cards up here so people who want to refer to those, please go ahead."

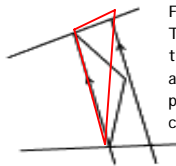
Students discuss the problem with their peers



5 minutes

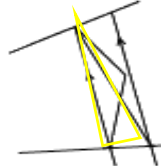
Public Class Work: Two students share their solution methods

Student 1's method



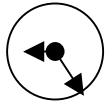
First you make a triangle. Then you draw a line parallel to the base of triangle. Since the areas of triangles between two parallel lines are the same, we can draw a line here.

Student 2's method



We make a triangle and draw a line parallel to the base of the triangle by fitting it with the apex. Since the length of the base doesn't change and the height in between the parallel lines doesn't change, So wherever you draw it the area doesn't change with the triangle that we got first.

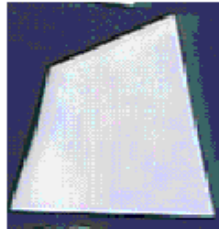
The teacher says it is hard to see so we will make it clearer. He then summarizes the two methods: the areas of the red triangle over here and the yellow triangle over here are the same areas.



22 minutes

Private Class Work: Students work on another problem

The teacher poses the next task - "Taking this quadrilateral... without changing the area... make it into a triangle. Please think three minutes and try doing it in your own way."

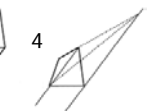
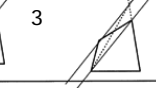
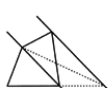


After about three minutes the teacher says: "People who are done please go to Instructor Ebina again. And people who want hints I will leave hint cards here, so please look at them and try doing it. It's also fine to do it with your friends."

The teacher circulates around the room observing and answering students questions.



3 minutes

Public Class Work: Teacher summarizes using a computer program projected on a TV monitor.

1 1/2 minutes

Public Class Work: The teacher assigns homework - "Let's try making a pentagon into a triangle."