## Area on the Geoboard

3) A second method is illustrated. Build a rectangle around the triangle with the same base and the same height. Use this method to find the area of the triangle.


In all the cases we have seen here, the area of the triangle can be computed as base times height divided by two, the same formula for the right triangle. So, for the kind of triangles we have studied so far we can say Area $=$ base $\times$ height $/ 2$. We will see later that indeed the same formula can be used for any triangle.

Exercise. Construct a different triangle. Find the total number of squares by showing that the triangle is half of a rectangle.


Activity 5. The area of a parallelogram

1) Construct a parallelogram that has one base parallel to the border of the geoboard.


Find the area of the parallelogram.
2) Construct your own parallelogram. Find a rectangle that has the same base (length) and the same area as the parallelogram.

- How does the height of the parallelogram compare with the width (height) of the rectangle?

Try to find the area of the parallelogram on your own, but if you can't, look at the hints and solutions at the end of this activity.

