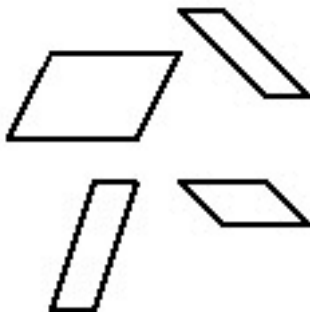


## Area on the Geoboard

Explain in your own words why the area of the parallelogram is given by  
 Area = base x height



3) Construct a different parallelogram. Find a rectangle with the same area and the same base. Compute the area of the parallelogram.

**An alternative way to find the area of a parallelogram.**

Construct a parallelogram. Divide the parallelogram into two congruent triangles by constructing one of the diagonals. Let  $b$  be the base of the parallelogram,  $h$  its height.



The area of each triangle is  $1/2 \times b \times h$ . What is the area of the parallelogram?

**Activity 6: The area of a triangle**

One kind of triangle that some children find more difficult is when the angle at the base is obtuse (bigger than  $90^\circ$ ). Here we have a triangle with a base of 4, and height of 3, with an obtuse angle.



1) Find the area of this triangle. Try to find the area of the triangle on your own, but if you can't, look at the hints and solutions at the end of the handout.

2) Find the area of one of the following triangles in at least two different ways.

