## Area on the Geoboard

3) Show that the right triangle is half of a rectangle. What is the total area of the rectangle? Use this fact to find the area of the triangle. Notice that the base of the triangle is equal to the length of the rectangle, and the height of the triangle is equal to the width of the rectangle. If $b$ is the base of the triangle, and $h$ is its height, convince yourself that we can write the formula for the area of a right triangle as $\frac{b x h}{2}$.


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


## Activity 4. Areas of other triangles

Construct a triangle that has its base parallel to one of the borders of the geoboard, and so that the angles at the base are acute (less than $90^{\circ}$ ).

1) Find the area of the triangle.

2) One method to find the area of the triangle is by building two right triangles as shown. We already know how to compute the area of a right triangle $\left(\frac{b x h}{2}\right)$. How can you use this?

