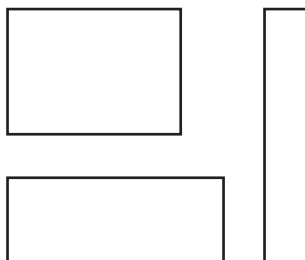


## Area on the Geoboard

4) Explain in your own words how the methods in 2 and 3 relate to the usual formula to compute the area of a rectangle:  $\text{Area} = \text{length} \times \text{width}$ .

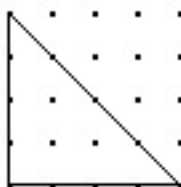
Construct a different rectangle. Find the total number of squares by counting, using rows, using columns, and by using a the formula  $\text{length} \times \text{width}$ .



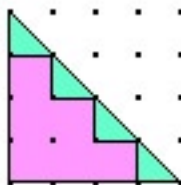
### Activity 3. The area of a right triangle

A right triangle is one that has a right angle ( $90^\circ$ ). Construct a right triangle on the geoboard that has its base parallel to the border, with a base of four units and a height of four units.

1) Find the area of the triangle by counting the number of unit squares contained within.



Here is one way to count the squares.



Construct a right triangle with a base of five units and a height of five units. Verify that there are 10 whole squares, and five half squares for a total area of  $12\frac{1}{2}$  unit squares.

For other triangles it may not be as easy to count parts of squares. We will use a different method to find the area of a right triangle.

2) Construct a right triangle with a base of six units and a height of four units.

