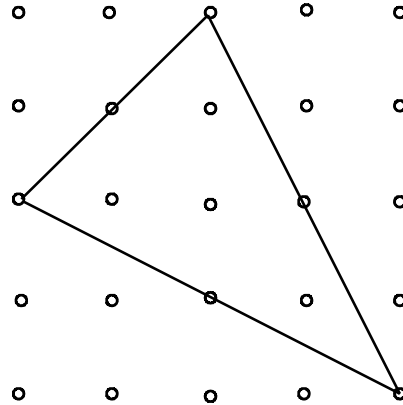


Geoboard Activities

The following is a sample of activities which are being used in math for elementary school teacher courses at Humboldt State University and in area middle school classrooms.

Consider the square area bounded by 4 adjacent pegs to be 1 square unit.

1. Find the area of this triangle. See if you can find more than one way to calculate the area.



2. Make various shapes on your geoboard such that each shape does not cross itself anywhere. For each shape, calculate its area. Make a chart for your shapes, listing the number of pegs each shape touches (T), the number of pegs totally enclosed in the interior of each shape (I) and the area of the shape (A). Look for a formula that describes the algebraic relationship among these three variables. (Hint -- find a systematic way to organize your data.)

T									
I									
A									

3. How many triangular regions of different area can you create on your geoboard where all three vertices of the triangle are pegs of the board?
4. How many distinct lengths of line segments can you make on your geoboard where both endpoints of the segment are pegs of the board?
5. How many noncongruent triangles can you make on your geoboard where all three vertices of the triangle are pegs of the board?
6. How many different size squares can you make on your geoboard? Find the area of each.