

EDMC 330 – Teaching Young Children Mathematics
Making Friends with Fractions
Geoboards and Fractions

An Introduction:

A Geoboard is a square board on which twenty-five pegs equidistant in placement form a five-by-five rectangular array. The pegs form vertices of sixteen smaller squares arranged in four rows and four columns. Students can make shapes on the Geoboards by placing rubber bands around a section of pegs.

Your task:

With the individuals in your group, I am asking you to divide the entire area of the Geoboard into smaller sections that represent halves, fourths, and eighths of the entire areas of the Geoboard.

The rules are as follows:

- No subdivisions of the Geoboard may overlap
AND
- You must use the entire area of the whole Geoboard

In how many different ways can you form arrangements of halves, fourths, and eighths on your Geoboard?

After you determine a possible arrangement of how to split the area of the Geoboard into halves, fourths, and eighths, share your design with your group and explain to them HOW YOU KNOW your thinking is correct.

Once the group agrees upon an arrangement, draw the arrangement on your dot paper so that you have a collective record of your thinking.

