

ALL TIED UP

Tie approximately 40-50 feet of yarn into a large loop.

Select 4 students to hold the string in the shape of a rectangle.

Tell students that you are going to determine the area of the rectangle, not with square units, but with people.

Select the number of students to fill the long rectangle, having them stand shoulder-to-shoulder. The rectangle should only be wide enough to accommodate one student front-to-back.

Verify with all students that the area of this long rectangle is however many students fit comfortably within the string. Explain that this area is in student area units.

Have students get out from inside the string and change the shape of the string to a square.

Ask the students whether the length of the string has changed when its shape was altered.

Have the 'student area units' get back inside the string. What do you notice?

Have the students write about what they observed.

Extension: Matt is planning to plant a garden. To protect it from animals he intends to put a fence around the garden. He has 24 meters of fence. If he wants to make a rectangular garden with the largest possible area, what should the dimensions of the garden be?

Adapted from: Number Sense, B. Leibfritz, Instructional Fair, T.S. Denison, 1997.