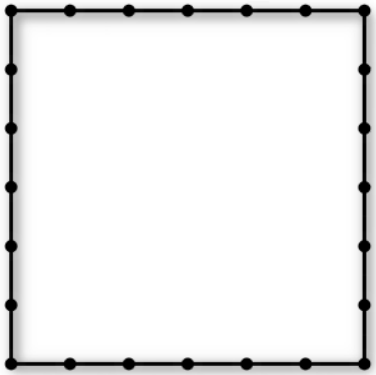
Janice has a square wooden board with dimensions 1 foot by 1 foot.

She wants to make a rectangular sign with dimensions $\frac{5}{6}$ foot by $\frac{2}{3}$ foot by making two straight cuts to the board.

The square represents a 1-foot by 1-foot square. You may want to use the square to decide where to make the two cuts by drawing two lines. Click on 2 pairs of opposite points to draw the lines where Janice can make the cuts.

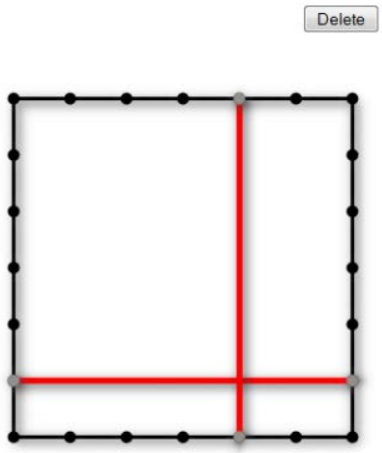
Delete



What will be the area, in square feet, of the rectangular sign?

_____ square feet

Grade 5	The Area of a Cut Board
Item Type	Type I – 1 point
Evidence Statement	**5.NF.4b-1:** Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction. a. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas. Clarifications for 5.NF.4b-1: i) 50% of the tasks present students with the rectangle dimensions and ask students to find the area; 50% of the tasks give the fractions and the product and ask students to show a rectangle to model the problem.

Most Relevant Standards for Mathematical Content	**5.NF.4b:** Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas. This standard is major content in the grade based on the PARCC Model Content Frameworks.
Most Relevant Standards for Mathematical Practice	This is a simple modeling situation (MP.4) in which students solve a word problem using content knowledge from the grade.
Item Description and Assessment Qualities	Here the area of the board is 1 square foot and students can use the technology to create a diagram that helps them solve the problem.  Note: The grid tool will not be scored in this task. The student types the answer in the space provided and the technology scores the item by checking to see if the value is equivalent to $\frac{10}{18}$.
Scoring Information	$\frac{10}{18}$ or other equivalent expressions