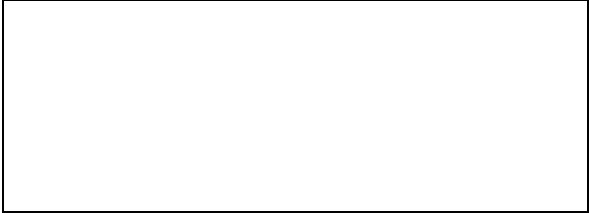


Common Core Learning Standards	Concepts	Embedded Skills	Vocabulary
<p><b>Apply and extend previous understandings of multiplication and division to multiply and divide fractions.</b></p>	<p><b>Area of rectangles with fractional side lengths</b></p>	<p>Compute the area of a rectangle with fractional side lengths.</p>	<ul style="list-style-type: none"> <li>▪ Tiling</li> <li>▪ unit square</li> <li>▪ equivalence</li> </ul>
<p><b>5.NF.4b.</b> 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.</p>		<p>Tile a unit square into unit fraction side lengths.</p>	
		<p>Prove through tiling the equivalence of multiplication and area.</p>	

## SAMPLE TASKS

1. (See drawing in the answer key)  
Find the area of a farmer's field with a width a quarter of a mile and length of  $\frac{2}{3}$  of a mile.

- Calculate the area of the farmer's field.
- Draw a picture using tiling to show your solution.



$\frac{5}{6}$  m

$\frac{3}{4}$  m

Find the area of this large picture frame with a length of  $\frac{5}{6}$  of a meter and a width of  $\frac{3}{4}$  of a meter. Use tiling as a visual fraction model to answer the question.