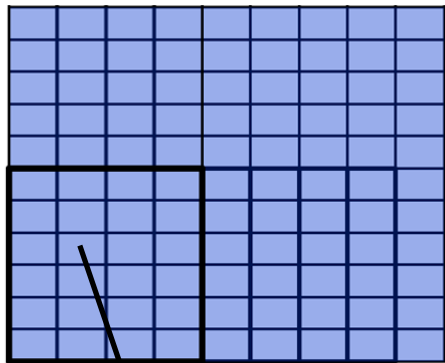


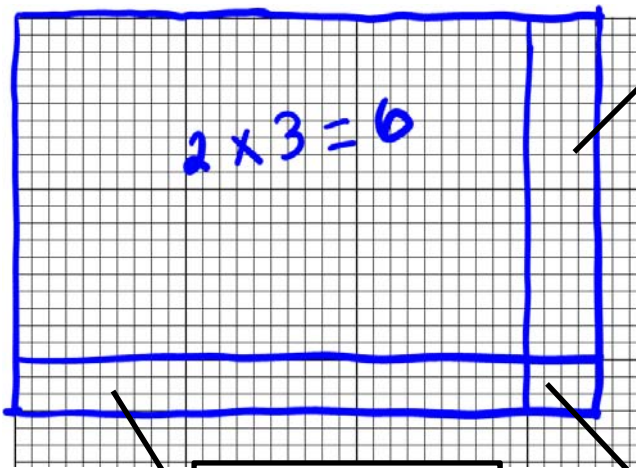
1. Draw an area diagram for the product:  $2\frac{1}{4} \times 1\frac{5}{6}$ . Show and explain how to use the diagram to find the product using a third-grade (number of unit fractions) approach.



There are 4x6 equal parts in 1 square unit, so each part has size  $\frac{1}{24}$  square units

There are  $9 \times 11 = 99$  parts in the rectangle, so the total area =  
 $2\frac{1}{4} \times 1\frac{5}{6} = \frac{99}{24} = \frac{33}{8} = 4\frac{1}{8} \text{ units}^2$

2. Draw an area diagram for the product  $2.3 \times 3.4$  on a provided grid. Show how to use the diagram to find the product using a distributive law approach.



$2 \times .4 = .8$

$.3 \times 3 = .9$

$.3 \times .4 = .12$

$$\begin{array}{r}
 1 \\
 6 \\
 .8 \\
 .9 \\
 \hline
 0.12 \\
 \hline
 7.82
 \end{array}$$

$2.3 \times 3.4 = 7.82$