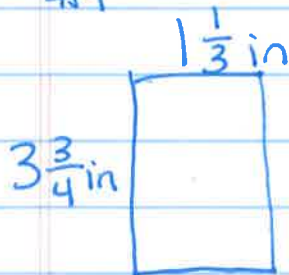


M5L13: Multiplying mixed numbers to determine area.

#1



$$3\frac{3}{4} \times 1\frac{1}{3}$$

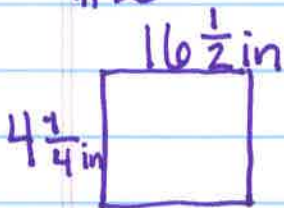
	$3 + \frac{3}{4}$	
1	3	$\frac{3}{4}$
$+$		
$\frac{1}{3}$	1	$\frac{3}{12}$

$$3 + 1 + \frac{3}{4} + \frac{3}{12}$$

$$4 + \frac{3}{4} + \frac{1}{4} = 5 \text{ in}^2$$

$$\frac{15}{4} \times \frac{4}{3} = \frac{60}{12} = 5 \text{ in}^2$$

#2



$$16\frac{1}{2} \times 4\frac{1}{4} =$$

	$16 + \frac{1}{2}$	
4	64	2
$+$		
$\frac{1}{4}$	4	$\frac{1}{8}$

$$64 + 2 + 4 + \frac{1}{8} = 70\frac{1}{8} \text{ in}^2$$

$$\frac{33}{4} \times \frac{17}{4} = \frac{561}{8} = 70\frac{1}{8} \text{ in}^2$$

$$\begin{array}{r} 70 \\ 8 \overline{) 561} \\ \underline{-56} \\ 01 \\ \underline{-0} \\ 1 \end{array}$$

Name _____

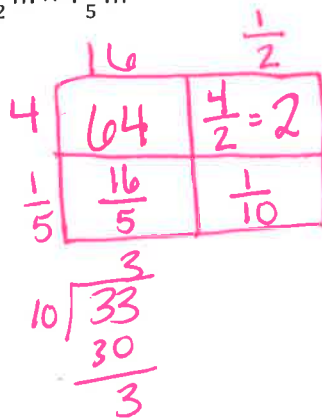
Date _____

1. Find the area of the following rectangles. Draw an area model if it helps you.

a. $\frac{5}{4} \text{ km} \times \frac{12}{5} \text{ km}$

$$\frac{5}{4} \times \frac{12}{5} = \frac{60}{20} = 3 \text{ km}^2$$

b. $16\frac{1}{2} \text{ m} \times 4\frac{1}{5} \text{ m}$



$$64 + 2 + \frac{16}{5} + \frac{1}{10}$$

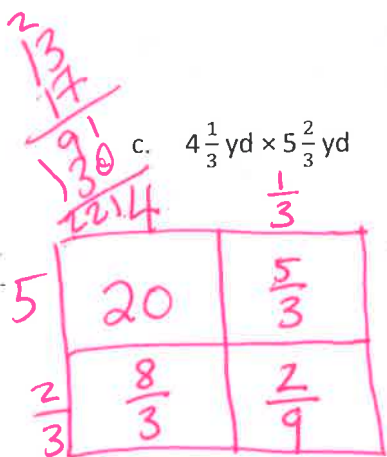
$$66 + \frac{32}{10} + \frac{1}{10}$$

$$66 + \frac{33}{10}$$

$$66 + 3\frac{3}{10}$$

$$\underline{69\frac{3}{10}}$$

c. $4\frac{1}{3} \text{ yd} \times 5\frac{2}{3} \text{ yd}$

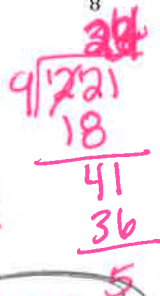


~~$\frac{13}{3} \times \frac{17}{3} = \frac{221}{9}$~~

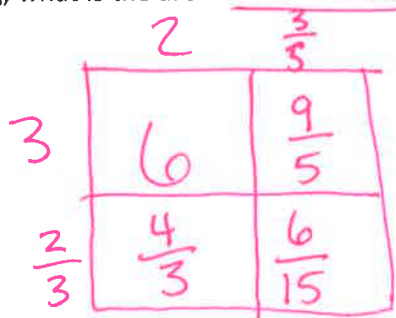
$$\frac{13}{3} \times \frac{17}{3} = \frac{221}{9}$$

~~221~~
 $\frac{221}{9}$

d. $\frac{7}{8} \text{ mi} \times 4\frac{1}{3} \text{ mi}$



2. Julie is cutting rectangles out of fabric to make a quilt. If the rectangles are $2\frac{3}{5}$ inches wide and $3\frac{2}{3}$ inches long, what is the area of four such rectangles?

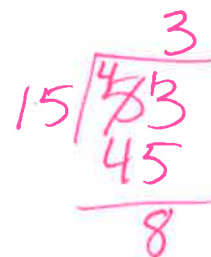


$$6 + \frac{9}{5} + \frac{4}{3} + \frac{6}{15}$$

$$6 + \frac{27}{15} + \frac{20}{15} + \frac{6}{15} = \frac{53}{15}$$

$$6 + 3\frac{8}{15}$$

$$9\frac{8}{15} \times 4$$



$$(9 \times 4) + (4 \times \frac{8}{15})$$

$$36 + \frac{32}{15}$$

184
 $36 + 2\frac{2}{15}$
 $38\frac{2}{15}$