Name: _____ Date: _____

MathByExample

Multiplying and Dividing Fractions

Area Problems (Part 2)

CCSS 5.NF.B.4.B

SET ONE

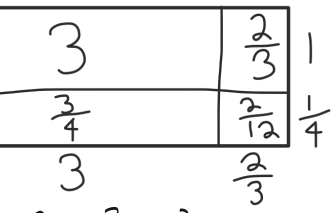
1. Study Caleb's correct work.

Name: Caleb

Find the area of the rectangle below.

$3\frac{2}{3}$ cm

$1\frac{1}{4}$ cm



$3 + \frac{2}{3} + \frac{3}{4} + \frac{2}{12}$

$3 + \frac{2}{3}\times\frac{4}{4} + \frac{3}{4}\times\frac{3}{3} + \frac{2}{12}$

$3 + \frac{8}{12} + \frac{9}{12} + \frac{2}{12}$

$3 + \frac{19}{12}$

$3 + 1\frac{7}{12}$

$4\frac{7}{12}$ cm²

2. Answer the question.

- In the step marked with an arrow, why did Caleb write cm², rather than cm?

3. Then complete this one.

Find the area of the rectangle below.

$2\frac{1}{2}$ m

$2\frac{1}{7}$ m

© 2017 SERP Institute

Area Problems (Part 2), continued

SET TWO

1. Study Leah's incorrect work.

Name: LEAH

Find the area of the rectangle below.

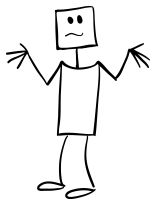
$4\frac{1}{3}$ km

$2\frac{1}{3}$ km

$(4 \times 2) + (\frac{1}{3} \times \frac{1}{3})$

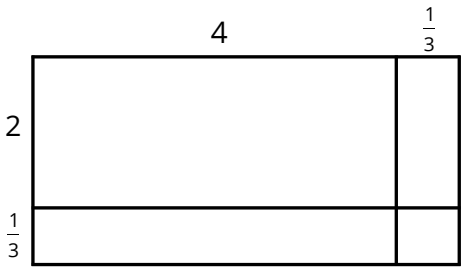
$= 8 + \frac{1}{9}$

$= 8\frac{1}{9}$ km²



2. Answer these questions.

- Complete the area model below to help Leah find the correct solution.



- Based on your area model above, why should Leah have added together four multiplication expressions, rather than two?

3. Then complete this one.

Find the area of the rectangle below.

$6\frac{3}{4}$ mi

$2\frac{2}{3}$ mi

© 2017 SERP Institute