Oct 15

Warm-up

1)

Lily ate $\frac{2}{5}$ of a pizza, and her brother ate $\frac{1}{3}$ of the same pizza. How much of the pizza did they eat together?

$\frac{2}{5} + \frac{1}{3}$

5: 5, 10, 15, 20
3: 3, 6, 9, 12, 15

$\frac{2\times3}{5\times3} + \frac{1\times5}{3\times5}$

$\frac{6}{15} + \frac{5}{15}$

$\frac{11}{15}$

2)

David pours $\frac{3}{8}$ of a liter of water into a bottle in the morning and adds another $\frac{1}{4}$ of a liter in the afternoon. How much water is in the bottle now?

$\frac{3}{8} + \frac{1}{4}$

8: 8, 16, 24
4: 4, 8

$\frac{3}{8} + \frac{1\times2}{4\times2}$

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

$\frac{5}{8}$

MODELLING FRACTION ADDITION WITH AREA MODELS

STEPS:

1. Create an area model for the both fractions in the addition equation

> Use horizontal lines for one area model, and vertical lines for the other

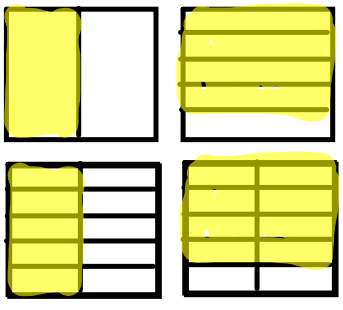
2. Cut both area models into the denominator of the other fraction using lines going the opposite way.

> This will give you two equivalent fractions with common denominators.

3. Count up the number of squares in one area model to get the denominator, and the TOTAL number of SHADED squares to get your numerator.

EXAMPLE:

$\frac{1}{2} + \frac{4}{5}$



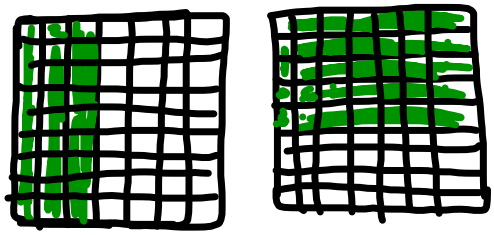
$\frac{5}{10}$ $\frac{8}{10}$

$\frac{13}{10}$

$\frac{13}{10}$

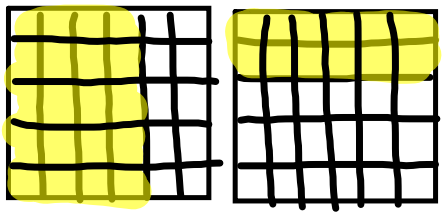
Let's try these together (copy it down)

(a) $\frac{3}{7} + \frac{5}{9}$



$\frac{62}{63}$

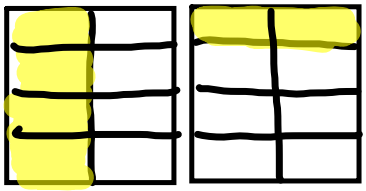
(b) $\frac{4}{6} + \frac{2}{5}$



$\frac{32}{30} \begin{matrix} \div 2 \\ \div 2 \end{matrix} = \frac{16}{15} = 1\frac{1}{15}$

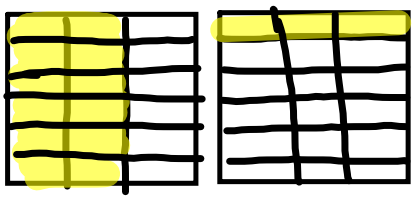
Try these on your own!! Model with an area model

1) $\frac{1}{2} + \frac{1}{4}$



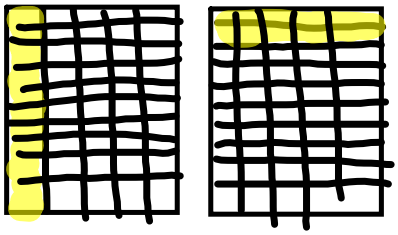
$\frac{6}{8} \overset{\div 2}{=} \frac{3}{4}$

2) $\frac{2}{3} + \frac{1}{6}$



$\frac{15}{18} \overset{\div 3}{=} \frac{5}{6}$

3) $\frac{1}{5} + \frac{2}{10}$



$\frac{20}{50} \overset{\div 10}{=} \frac{2}{5}$

Try these on your own!! Model with an area model

4) $\frac{3}{4} + \frac{2}{5}$

5) $\frac{1}{3} + \frac{4}{9}$

6) $\frac{5}{12} + \frac{7}{18}$

Attachments

EurekaAddingUnlikeFractionsUsingtheRectangularFractionModelAreaModule-1.pdf