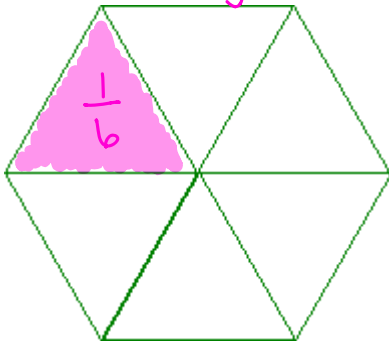


Name: _____

Date: _____

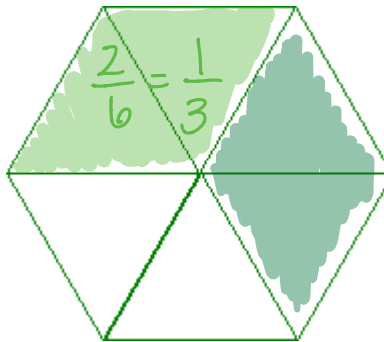
Learning Goal 2.1	I can add and subtract fractions.
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triangles



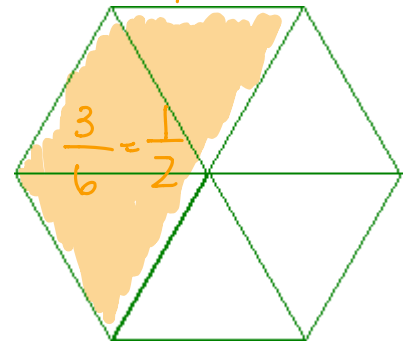
$$\begin{aligned} \frac{1}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6} \\ = \frac{6}{6} \\ = 1 \end{aligned}$$

rhombus



$$\begin{aligned} \frac{1}{3} + \frac{1}{3} + \frac{1}{3} \\ = \frac{3}{3} \\ = 1 \end{aligned}$$

trapezoid



$$\begin{aligned} \frac{1}{2} + \frac{1}{2} \\ = \frac{2}{2} \\ = 1 \end{aligned}$$

Fact If you increase the size of the numerator while keeping the denominator equal, the value of the fraction

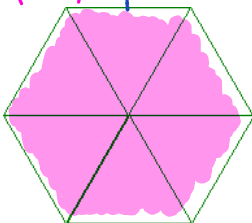
$$\frac{6}{7} \rightarrow \frac{9}{7} \quad \text{the value of the fraction increases.}$$

Fact If you increase the size of the denominator while keeping the numerator equal, the value of the fraction

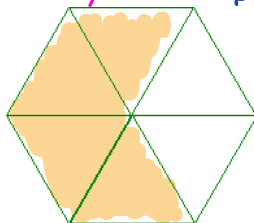
$$\frac{9}{69} \quad \frac{9}{70} \quad \text{the value of the fraction decreases.}$$

Example Use equivalent fractions to draw each fraction

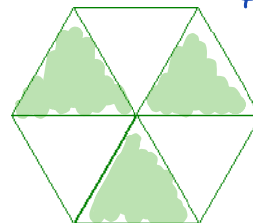
$$\left(\frac{6}{6}\right) \times \frac{1}{1} = \frac{6}{6}$$



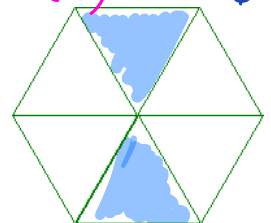
$$\left(\frac{2}{2}\right) \times \frac{2}{3} = \frac{4}{6}$$



$$\left(\frac{3}{3}\right) \times \frac{1}{2} = \frac{3}{6}$$



$$\left(\frac{2}{2}\right) \times \frac{1}{3} = \frac{2}{6}$$



Example Use the pattern blocks to add the following fractions

a. $\frac{2}{3} + \frac{1}{6} =$

b. $\frac{1}{2} + \frac{1}{6} =$

Example Without using pattern blocks, evaluate the following expressions

4
8
12

a. $\frac{1}{12} + \frac{3}{4}$ LCM(4, 12) = 12

$$= \frac{1}{12} + \frac{9}{12}$$

$$= \frac{10 \div 2}{12 \div 2} = \frac{5}{6}$$

b. $5\frac{3}{5} + \frac{1}{4}$ LCM(4, 5)

$$= 5\frac{12}{20} + \frac{5}{20}$$

$$= 5\frac{17}{20}$$

4
8
12
16
20

c. $2\frac{12}{15} + 4\frac{2}{5}$

d. $\frac{7}{9} - \frac{1}{6}$

$$= \frac{112}{20} \quad (= 5\frac{17}{20})$$

$$\begin{array}{r} 237 \\ - 19 \\ \hline \end{array}$$

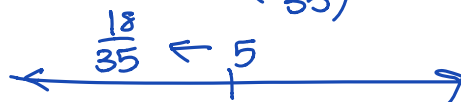
e. $9 - 3\frac{2}{7}$

f. $8\frac{2}{7} - 3\frac{4}{5}$ LCM(5, 7) = 35

$$= 8\frac{10}{35} - 3\frac{28}{35}$$

$$= 5(-\frac{18}{35})$$

5
10
15
20
25
30
35



$$= \frac{290}{35} - \frac{133}{35}$$

$$= \frac{157}{35}$$

$$= 4\frac{17}{35}$$

Assignment

Handout

Quiz Next Day!

$$8\frac{2}{7} = 8 + \frac{2}{7}$$