



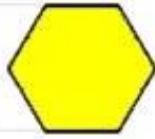


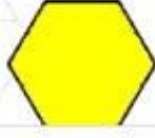







Modeling Fractions using Pattern Blocks and Cuisenaire Rods

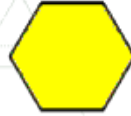

Model Pattern Blocks



If  +  = 1, what is  +  ?



If  +  = 1, what is  ?



If  -  = 1, what is  +  ?

If  +  = $\frac{2}{3}$, what is 1?

If  +  = $\frac{4}{5}$, what is $\frac{2}{5}$?

If  +  = $\frac{3}{4}$, what is $\frac{1}{2}$?

If  +  = $\frac{5}{8}$, what is $\frac{3}{4}$?

If  -  = $1\frac{1}{3}$, what is $\frac{2}{3}$?

Pattern Block images are from <http://math.rice.edu/~lanius/Patterns/>

Model Cuisenaire Rods

- If a dark green rod equals 1, then complete the following:
 Light green = Red = Purple = Orange =
- If a dark green rod equals $\frac{3}{4}$, then complete the following:
 Purple = Red = Blue = Orange =
- If the light green rod represents $\frac{1}{3}$, which rod represents the following:
 $1 =$ _____ $\frac{2}{3} =$ _____

Modeling Operations with Fractions using Pattern Blocks and Cuisenaire Rods

Addition/Subtraction

$$\frac{3}{4} + \frac{1}{2}$$

$$\frac{2}{3} + \frac{1}{9}$$

$$\frac{1}{2} - \frac{2}{5}$$

$$1\frac{5}{12} - \frac{5}{6}$$

Multiplication/Division

$$\frac{1}{4} \cdot \frac{2}{3}$$

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

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

$$\frac{2}{3} \div \frac{3}{4}$$