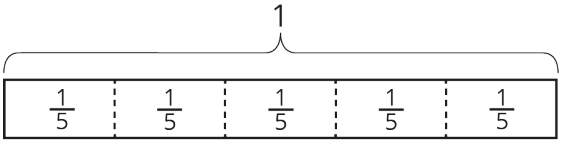
Unit 4 Lesson 4: How Many Groups? (Part 1)

1 Equal-sized Groups (Warm up)

Student Task Statement

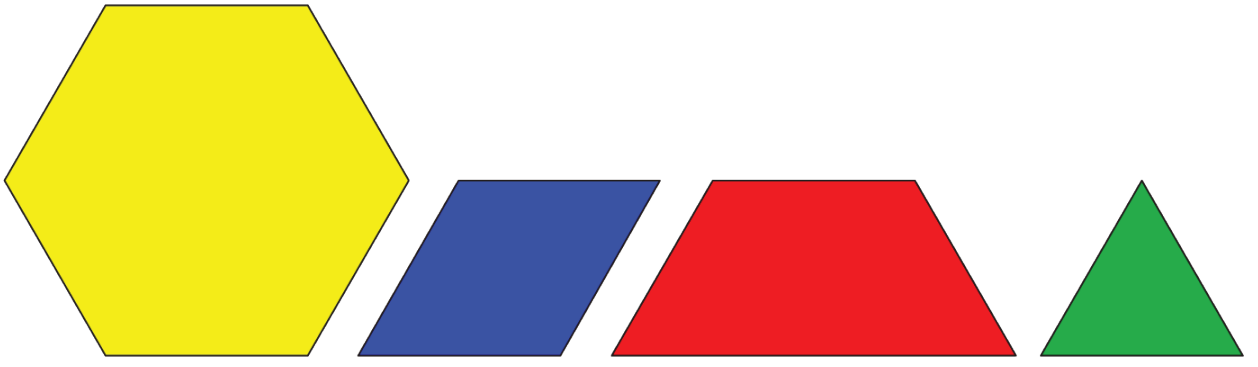
Write a multiplication equation and a division equation for each sentence or diagram.

1. Eight $5 bills are worth $40.
2. There are 9 thirds in 3 ones.
3. 

2 Reasoning with Pattern Blocks

Student Task Statement

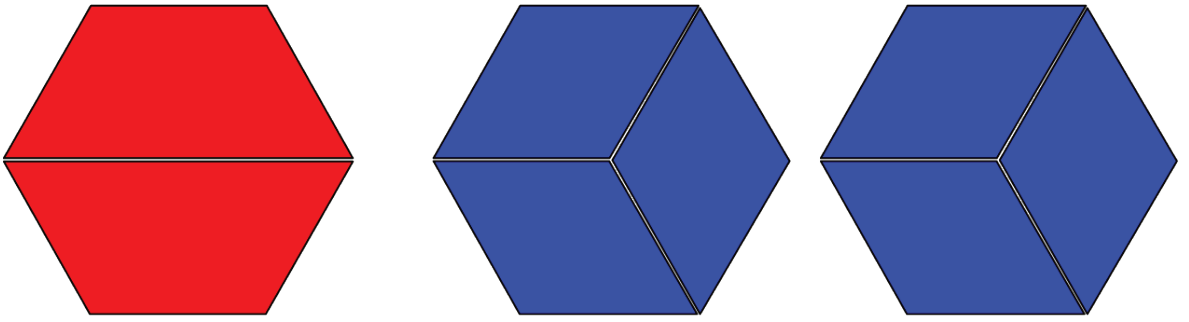
Your teacher will give you pattern blocks as shown here. Use them to answer the questions.



1. If a hexagon represents 1 whole, what fraction does each of the following shapes represent? Be prepared to show or explain your reasoning.

   - 1 triangle
   - 1 rhombus
   - 1 trapezoid
   - 4 triangles
   - 3 rhombuses
   - 2 hexagons
   - 1 hexagon and 1 trapezoid

2. Here are Elena's diagrams for $2 \cdot \frac{1}{2} = 1$ and $6 \cdot \frac{1}{3} = 2$. Do you think these diagrams represent the equations? Explain or show your reasoning.



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

$6 \cdot \frac{1}{3} = 2$

3. Use pattern blocks to represent each multiplication equation. Remember that a hexagon represents 1 whole.

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

   b. $2 \cdot \frac{3}{2} = 3$

4. Answer the questions. If you get stuck, consider using pattern blocks.

   a. How many $\frac{1}{2}$s are in 4?

   b. How many $\frac{2}{3}$s are in 2?

   c. How many $\frac{1}{6}$s are in $1\frac{1}{2}$?