

CHANGING WHOLESL: PATTERN BLOCK CHALLENGE

UNIT F Compose and decompose fractions flexibility with models and symbols

SAMPLE 1

Using the Pattern Blocks

- If a hexagon is worth 1, what is:
 - a one green triangle worth?
 - b one red trapezoid worth?
 - c one blue rhombus worth?
 - d three green triangles worth?
 - e two blue rhombi worth?
 - f six red trapezoids worth?

f) Notice this student realizes that six trapezoids are the same as three pairs of trapezoids, with each pair representing one whole. They use multiplication to obtain the correct answer of three wholes.

$2 \text{ trapezoids} \times 3 = 3 \text{ wholes}$

e) Notice this student intuitively adds $\frac{1}{3} + \frac{1}{3}$ correctly to obtain $\frac{2}{3}$.

Using the Pattern Blocks

- If a hexagon is worth 3, what is:
 - a one blue rhombus worth?
 - b one green triangle worth?
 - c six red trapazoids worth?
 - d one red trapezoid worth?

c) This student determines that two red trapezoids make a hexagon. The student has shown two trapezoids (each worth one and one-half) are multiplied by three to arrive at three hexagons for a total value of nine.

"6 trapezoids = 9"