Start with the **yellow hexagon** as representing **one whole.**

1. Fill in the chart below by covering the hexagon with the pattern block shapes indicated.

|  |  |  |
| --- | --- | --- |
| **Shape** | **Number of Pieces to Cover One Whole** | **What Fraction of the Hexagon does this shape represent?** |
| Hexagon |  |  |
| Red Trapezoid | 2 |  |
| Blue Rhombus |  |  |
| Green Triangle |  |  |

1. Notice that the red trapezoid covers the same part of the hexagon as 3 green triangles. When two fractions name the same part of the whole, they are said to be **equivalent fractions**.

(red trapezoid= (green triangles)

1. How many green triangles cover the same amount as one blue rhombus? Trace the blue rhombus and green triangles in the hexagons below and write an equivalent fraction.

4. Now put **two yellow hexagons** together and let this new shape represent **one whole**.

Fill in the chart below by covering the 2 hexagons (one whole) with the shapes indicated.

|  |  |  |
| --- | --- | --- |
| **Shape** | **Number of Pieces to Cover One Whole** | **What Fraction of the Hexagon does this shape represent?** |
| Hexagon |  |  |
| Red Trapezoid |  |  |
| Blue Rhombus |  |  |
| Green Triangle |  |  |

1. Using the hexagons below show how many green triangles cover the same area as one red trapezoid. Write an equivalent fraction.

1. Five blue rhombuses cover what fractional part of the whole?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

How many green triangles cover the same as 5 blue rhombuses? \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Write an equivalent fraction based on the 5 blue rhombuses and the green triangles.

(Hint: If helpful, trace and draw these on a separate piece of paper)

1. Now put **one yellow hexagon** and **one red trapezoid** together. Let this new shape represent **one whole**. Trace this shape below.

What fractional part is represented by two red trapezoids? (Hint: Cover the new shape with trapezoids and think about what part 2 trapezoids represent out of the whole.)

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Now investigate how many green triangles it takes to cover the 2 red trapezoids. What fractional part of the whole is represented by green triangles?

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Write an equivalent fraction based on the 2 red trapezoids and the green triangles.

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**Extension**: Use the pattern blocks to find more equivalent fractions. Write two more equivalent fraction statements. What do you notice about equivalent fractions?