

The Many Faces of Equivalent Fractions

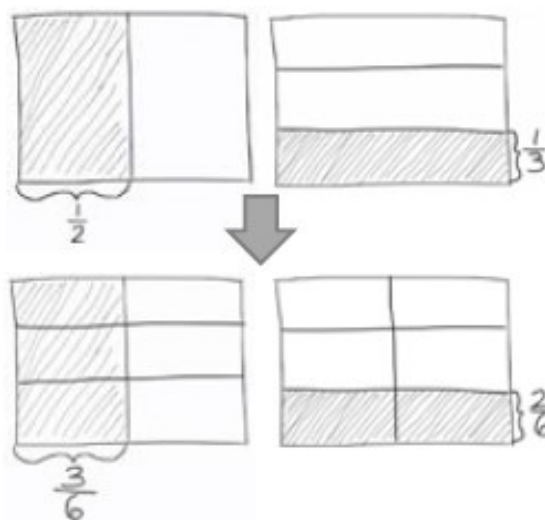
Standard Method:

The standard or typical method of multiplying fractions to create equivalents with like denominators.

$$\begin{array}{r} \frac{1}{2} + \frac{1}{3} = \\ \frac{3}{6} + \frac{2}{6} = \\ \frac{5}{6} \end{array}$$

The Rectangular Area Model:

Shows why multiplying the fractions by the other's denominator creates equivalent fractions with like denominators. First, students draw a wide rectangle and partition it with vertical lines to create the equal portions indicated by the denominator, representing the first fraction with a bracket and shading. They then partition a second congruent rectangle with horizontal lines to show the second fraction. Next, they partition both rectangles with matching lines (transpose onto one another) to create like units.



$$\begin{array}{r} \frac{3}{6} + \frac{2}{6} = \\ \frac{5}{6} \end{array}$$