## Multiplying Fractions

Multiplying fractions is actually easier than adding them. All you do is multiply the numerators and then multiply the denominators.

*Examples:* $\frac{2}{3} \times \frac{5}{7} = \frac{2 \times 5}{3 \times 7} = \frac{10}{21}$

$\frac{1}{2} \times \frac{3}{5} \times \frac{7}{4} = \frac{1 \times 3 \times 7}{2 \times 5 \times 4} = \frac{21}{40}$

Sometimes you can *cancel* before multiplying. Canceling is a shortcut that makes the multiplication go faster because you're multiplying with smaller numbers. It's very similar to reducing: if there is a number that divides evenly into both the numerator and the denominator, do that division before multiplying. If you forget to cancel, you will still get the right answer, but you will have to reduce it.

*Example:* $\frac{5}{6} \times \frac{9}{20}$

1. Cancel the 6 and the 9 by dividing 3 into both of them: $6 \div 3 = 2$ and $9 \div 3 = 3$. Cross out the 6 and the 9.
2. Cancel the 5 and the 20 by dividing 5 into both of them: $5 \div 5 = 1$ and $20 \div 5 = 4$. Cross out the 5 and the 20.
3. Multiply across the new numerators and denominators: $\frac{1 \times 3}{2 \times 4} = \frac{3}{8}$.