

$$\frac{4}{2} \overset{\text{1}}{\nearrow} \frac{6}{3} = \frac{\overset{\text{This is important!}}{\textcircled{(3 \times 4)}} + \cancel{(2 \times 6)}}{\underset{\uparrow}{\cancel{2 \times 3}}} = \boxed{\frac{12 + 12}{6}} = \frac{24}{6} = \textcircled{4} \leftarrow \text{RESULT}$$

The diagram illustrates a common mistake in simplifying fractions. It shows the fraction  $\frac{4}{2}$  being simplified to  $\frac{6}{3}$  by multiplying both numerator and denominator by 1.5. The next step shows the fraction  $\frac{6}{3}$  being simplified to  $\frac{24}{6}$  by multiplying both numerator and denominator by 4. The final result is 4. The diagram highlights that the multiplication of the denominator by 3 is not necessary and that the final result is 4.

This multiplication is not  
 necessary Try to simplify.