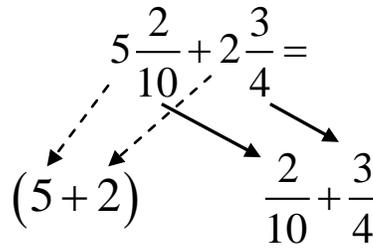
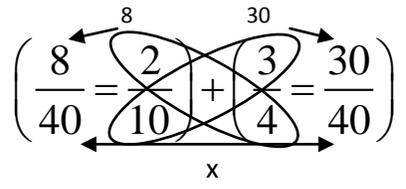


Addition Algorithms

Below are most of the algorithms that you and your classmates came up with in class. Please choose 1 or 2 algorithms that you will use on a regular basis.

Vertical set-up with wholes and fractions separated	Vertical set-up with mixed numbers kept together
$3\frac{4}{6} + 2\frac{1}{4} =$ <div style="display: flex; align-items: center; justify-content: center;"> <div style="text-align: right; margin-right: 10px;"> 3 $+ 2$ <hr style="width: 100%;"/> 5 </div> <div style="border-left: 1px solid black; padding-left: 10px;"> $\frac{4}{6} \left(\times \frac{2}{2} \right) = \frac{8}{12}$ $\frac{1}{4} \left(\times \frac{3}{3} \right) = \frac{3}{12}$ <hr style="width: 100%;"/> $\frac{11}{12} = 5\frac{11}{12}$ </div> </div> <p style="text-align: center; margin-top: 10px;"> </p>	$3\frac{4}{6} + 2\frac{1}{4} =$ $3\frac{4}{6} \left(\times \frac{2}{2} \right) = 3\frac{8}{12}$ $2\frac{1}{4} \left(\times \frac{3}{3} \right) = 2\frac{3}{12}$ <hr style="width: 100%; margin: 5px 0;"/> $5\frac{11}{12}$
Horizontal set-up with mixed numbers kept together	Convert to percents, add percents, convert back to fraction
$3\frac{4}{6} \left(\times \frac{2}{2} \right) + 2\frac{1}{4} \left(\times \frac{3}{3} \right)$ $3\frac{8}{12} + 2\frac{3}{12}$ $5\frac{11}{12}$	$2\frac{1}{2} + 1\frac{1}{4}$ <div style="display: flex; justify-content: center; align-items: center; margin: 10px 0;"> <div style="text-align: center; margin-right: 20px;"> \swarrow 250% </div> <div style="text-align: center;"> \swarrow 125% </div> </div> $250\% + 125\%$ $375\% = 3\frac{3}{4}$

Addition Algorithms

Converting mixed numbers to improper fractions, adding, then converting back to mixed numbers	Find common denominators by multiplying the two denominators and cross-multiplying to get numerators
$5\frac{2}{10} + 2\frac{3}{4} =$ $5\frac{2}{10} \left(\times \frac{2}{2} \right) = 5\frac{4}{20} = \frac{104}{20}$ $+ 2\frac{3}{4} \left(\times \frac{5}{5} \right) = 2\frac{15}{20} = \frac{55}{20}$ <hr style="width: 10%; margin-left: auto; margin-right: auto;"/> $\frac{159}{20} = 7\frac{19}{20}$	$5\frac{2}{10} + 2\frac{3}{4} =$  $(5+2) \quad \frac{2}{10} + \frac{3}{4}$  $(5+2) \quad \left(\frac{8}{40} + \frac{30}{40} \right)$ $\frac{8}{40} + \frac{30}{40} = \frac{38}{40}$ $(5+2) \quad 7 + \frac{38}{40} = 7\frac{38}{40} = 7\frac{19}{20}$