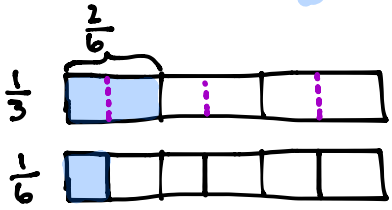
Name _____ Date _____

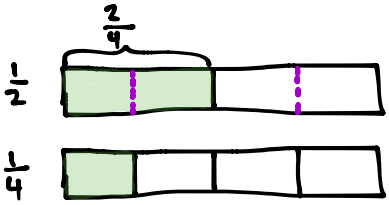
1. Use a tape diagram to represent each addend. Decompose one of the tape diagrams to make like units. Then, write the complete number sentence.

a. $\frac{1}{3} + \frac{1}{6}$

$= \frac{2}{6} + \frac{1}{6} = \frac{3}{6}$

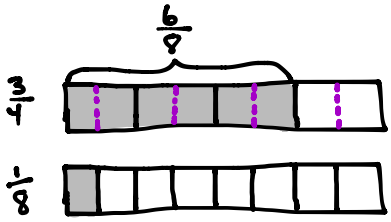


b. $\frac{1}{2} + \frac{1}{4} = \frac{2}{4} + \frac{1}{4} = \frac{3}{4}$



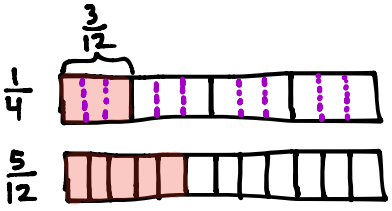
c. $\frac{3}{4} + \frac{1}{8}$

$= \frac{6}{8} + \frac{1}{8} = \frac{7}{8}$



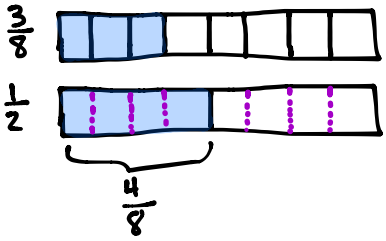
d. $\frac{1}{4} + \frac{5}{12}$

$= \frac{3}{12} + \frac{5}{12} = \frac{8}{12}$



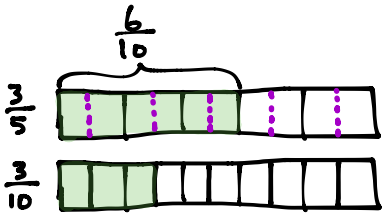
e. $\frac{3}{8} + \frac{1}{2}$

$= \frac{3}{8} + \frac{4}{8} = \frac{7}{8}$



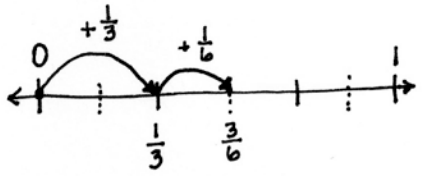
f. $\frac{3}{5} + \frac{3}{10}$

$= \frac{6}{10} + \frac{3}{10} = \frac{9}{10}$



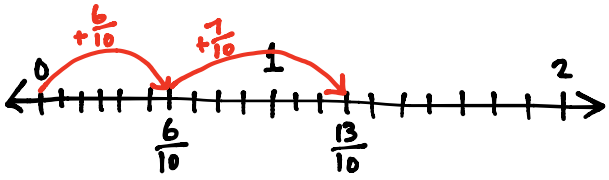
2. Estimate to determine if the sum is between 0 and 1 or 1 and 2. Draw a number line to model the addition. Then, write a complete number sentence. The first one has been completed for you.

a. $\frac{1}{3} + \frac{1}{6}$ $\frac{2}{6} + \frac{1}{6} = \frac{3}{6}$



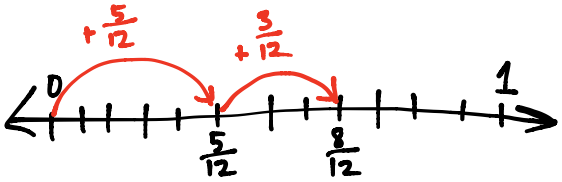
b. $\frac{3}{5} + \frac{7}{10}$

$= \frac{6}{10} + \frac{7}{10} = \frac{13}{10}$



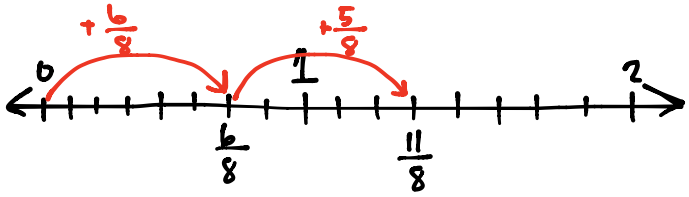
c. $\frac{5}{12} + \frac{1}{4}$

$= \frac{5}{12} + \frac{3}{12} = \frac{8}{12}$



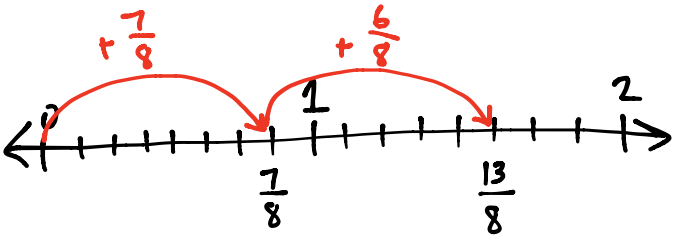
d. $\frac{3}{4} + \frac{5}{8}$

$= \frac{6}{8} + \frac{5}{8} = \frac{11}{8}$



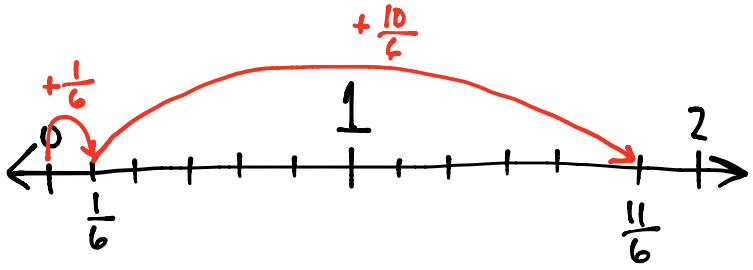
e. $\frac{7}{8} + \frac{3}{4}$

$= \frac{7}{8} + \frac{6}{8} = \frac{13}{8}$



f. $\frac{1}{6} + \frac{5}{3}$

$= \frac{1}{6} + \frac{10}{6} = \frac{11}{6}$



3. Solve the following addition problem without drawing a model. Show your work.

$\frac{1}{3} = \frac{1 \times 2}{3 \times 2} = \frac{2}{6}$

$\frac{5}{6} + \frac{1}{3}$

$= \frac{5}{6} + \frac{2}{6} = \frac{7}{6}$