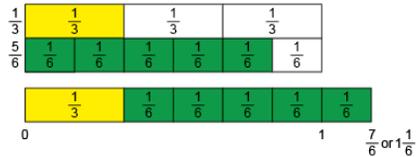# Activity 15 Assessment
Adding and Subtracting Fractions

Addition and Subtraction of Fractions with Unlike Denominators

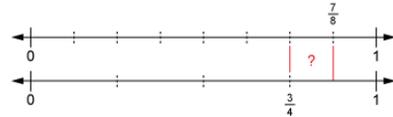| Concretely solves problems.	Models pictorially to solve problems.	Uses equivalent fractions to symbolically solve problems.	Fluently and flexibly solves problems.

Concretely solves problems.

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

"I used fraction strips. I can see that $\frac{1}{3} = \frac{2}{6}$ and that $\frac{1}{3} + \frac{5}{6} = \frac{7}{6}$, or $1\frac{1}{6}$."

Models pictorially to solve problems.

$$\frac{7}{8} - \frac{3}{4} = ?$$

"I used a double number line. I modelled $\frac{7}{8}$ on the top line and $\frac{3}{4}$ on the bottom line, then found the difference. From the double number lines, I see the difference is $\frac{1}{8}$."

Uses equivalent fractions to symbolically solve problems.

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

"I wrote equivalent fractions with a common denominator of 6.

$$\frac{1}{3} = \frac{2}{6} \text{ and } \frac{1}{2} = \frac{3}{6}$$

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

$$= \frac{6}{6}, \text{ or 1 whole.}"$$

Fluently and flexibly solves problems.

$$3\frac{1}{4} - 2\frac{7}{8} = ?$$

"I wrote $2\frac{7}{8}$ as an improper fraction, $\frac{23}{8}$. Then I subtracted $\frac{13}{4} - \frac{23}{8}$ using a common denominator of 8."

$$\frac{13}{4} - \frac{23}{8} = \frac{26}{8} - \frac{23}{8}$$

$$= \frac{3}{8}$$

Observations/Documentation