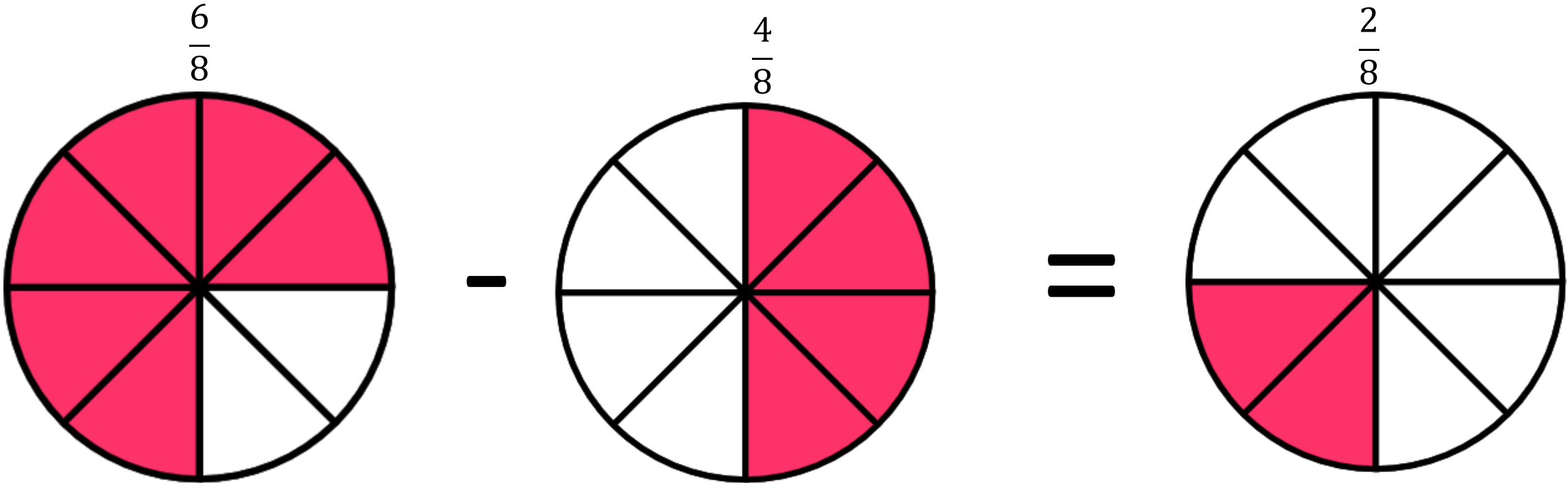# Subtraction Involving Mixed Numbers

Review: Subtracting Fractions with Like Denominators

Subtract the numerators
Keep the same denominators

$$\frac{6}{8}$$

$-$
$$\frac{4}{8}$$

$=$
$$\frac{2}{8}$$

Subtraction Involving Mixed Numbers

We can subtract mixed numbers by following these steps:

1. Write the mixed numbers as the whole number + the fraction

2. Subtract the whole numbers

3. Subtract the fractions

4. Combine the differences to form a mixed number

Example: $5\frac{6}{7} - 3\frac{2}{7}$

Step 1: $5\frac{6}{7} = 5 + \frac{6}{7}$ and $3\frac{2}{7} = 3 + \frac{2}{7}$ so $5\frac{6}{7} - 3\frac{2}{7} = 5 + \frac{6}{7} - 3 + \frac{2}{7}$
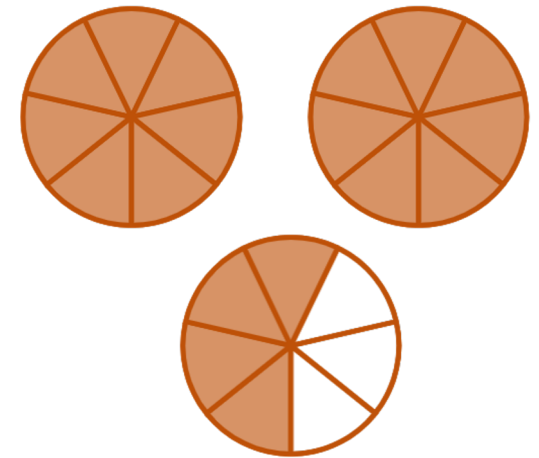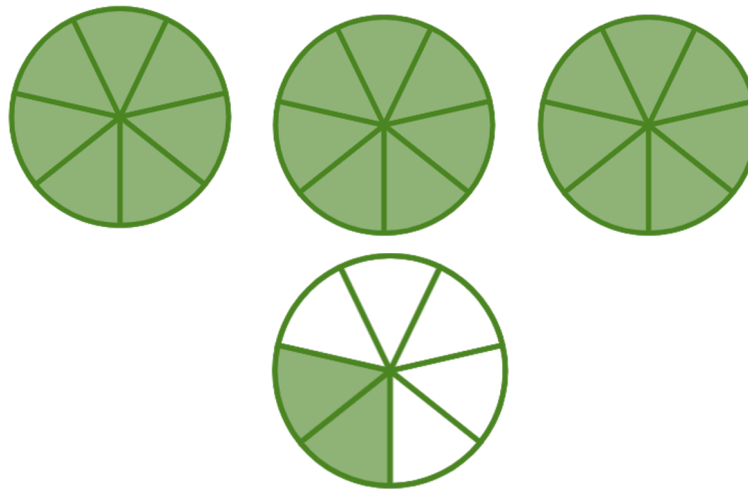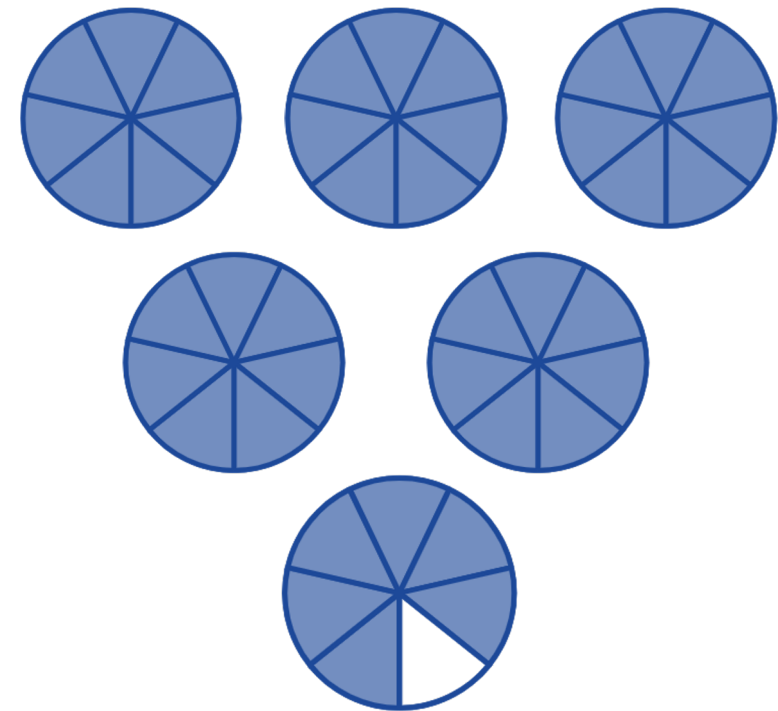
Step 2: $5 - 3 = 2$

Step 3: $\frac{6}{7} - \frac{2}{7} = \frac{4}{7}$

Step 4: $5\frac{6}{7} - 3\frac{2}{7} = 2\frac{4}{7}$

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Subtraction Involving Mixed Numbers using Models
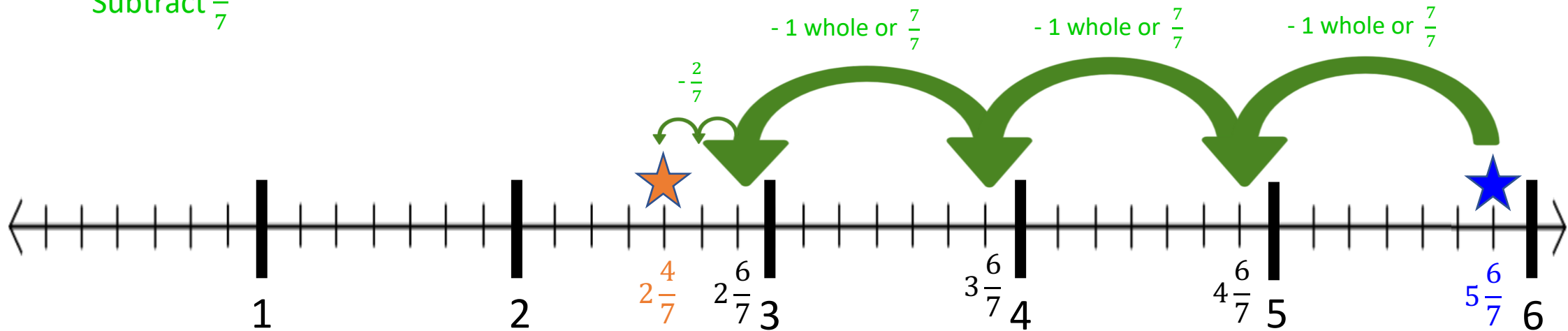
$$5\frac{6}{7} - 3\frac{2}{7} = 2\frac{4}{7}$$

Subtraction Involving Mixed Numbers using Number Lines

$$5\frac{6}{7} \quad - \quad 3\frac{2}{7} \quad = \quad 2\frac{4}{7}$$

Start at $5\frac{6}{7}$

Subtract 3 wholes

Subtract $\frac{2}{7}$

Start at $5\frac{6}{7}$ $\quad$ - 1 whole or $\frac{7}{7} = 4\frac{6}{7} - 1$ whole or $\frac{7}{7} = 3\frac{6}{7}$ - 1 whole or $\frac{7}{7} = 2\frac{6}{7}$ $-\frac{1}{7} - \frac{1}{7} = \quad 2\frac{4}{7}$

- 1 whole or $\frac{7}{7}$ $\qquad$ - 1 whole or $\frac{7}{7}$ $\qquad$ - 1 whole or $\frac{7}{7}$

$-\frac{2}{7}$

$2\frac{4}{7}$ $\quad$ $2\frac{6}{7}$ $\qquad$ $3\frac{6}{7}$ $\qquad$ $4\frac{6}{7}$ $\qquad$ $5\frac{6}{7}$

1 $\qquad$ 2 $\qquad$ 3 $\qquad$ 4 $\qquad$ 5 $\qquad$ 6

Let's Practice: Subtraction Involving Mixed Numbers

$$3\frac{3}{8} - 2\frac{1}{8} = \ 1\frac{2}{8}$$

$$4\frac{11}{12} - 2\frac{8}{12} = 2\frac{3}{12} = 2\frac{1}{4}$$