

REVIEW: Estimating Fraction Sums and Differences

Name _____

Key Concept and Vocabulary

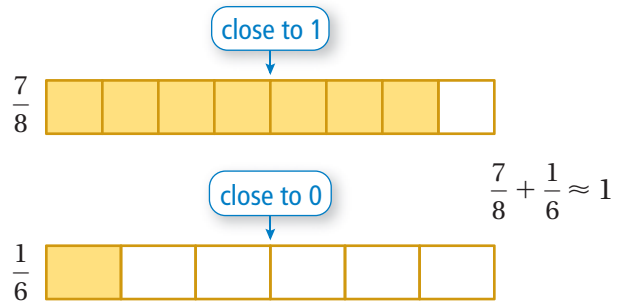
$$\frac{7}{8} + \frac{1}{6} \approx 1 + 0 = 1$$

Estimate proper fractions to be 0, $\frac{1}{2}$, or 1.

Estimation



Visual Model

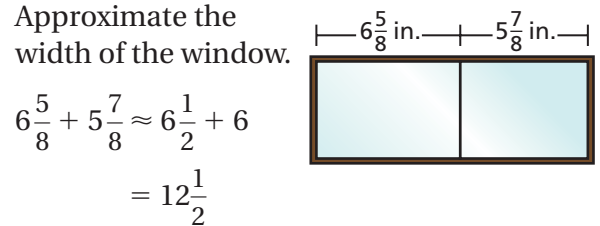


Skill Examples

- $\frac{3}{7} + \frac{3}{8} \approx \frac{1}{2} + \frac{1}{2} = 1$
- $\frac{8}{9} - \frac{5}{8} \approx 1 - \frac{1}{2} = \frac{1}{2}$
- $\frac{9}{10} + \frac{6}{7} \approx 1 + 1 = 2$
- $\frac{5}{12} - \frac{1}{16} \approx \frac{1}{2} - 0 = \frac{1}{2}$

Application Example

5. Approximate the width of the window.



• The window is about $12\frac{1}{2}$ inches wide.

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Estimate the sum or difference.

- $\frac{5}{9} + \frac{3}{7} \approx$ 1
- $\frac{6}{11} + \frac{11}{13} \approx$ $1\frac{1}{2}$
- $\frac{1}{10} + \frac{15}{8} \approx$ 2
- $\frac{11}{9} + \frac{6}{7} \approx$ 2
- $\frac{9}{10} - \frac{5}{11} \approx$ $\frac{1}{2}$
- $\frac{17}{8} - \frac{3}{5} \approx$ $1\frac{1}{2}$
- $\frac{11}{9} - \frac{1}{8} \approx$ 1
- $\frac{5}{2} - \frac{3}{7} \approx$ 2
- $1\frac{4}{5} + 2\frac{1}{7} \approx$ 4
- $2\frac{4}{7} + 3\frac{3}{5} \approx$ 6
- $5\frac{9}{10} - 4\frac{6}{10} \approx$ $1\frac{1}{2}$
- $1\frac{4}{5} - \frac{11}{14} \approx$ 1

Approximate the width of the window.

- 16 in.
- 50 cm

20. **DISTANCE** You walked $2\frac{1}{5}$ miles on Monday and $3\frac{7}{8}$ miles on Tuesday. Estimate the total number of miles you walked on Monday and Tuesday. 6 miles

21. **ESTIMATION STRATEGY** Estimating a fraction to be 0, $\frac{1}{2}$, or 1 does not work well with fractions such as $\frac{1}{4}$ and $\frac{3}{4}$. Why? $\frac{1}{4}$ is halfway between 0 and $\frac{1}{2}$. $\frac{3}{4}$ is halfway between $\frac{1}{2}$ and 1. The estimate is not close enough to the fraction.