REVIEW: Estimating Fraction Sums and Differences

Name _____

Key Concept and Vocabulary

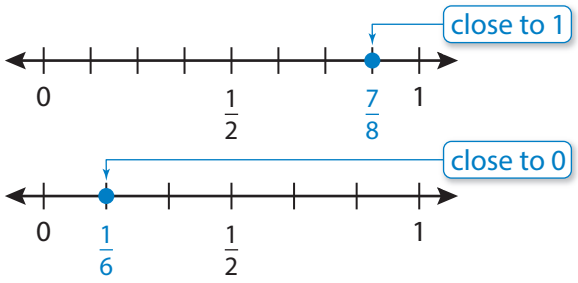
$\frac{7}{8} + \frac{1}{6}$

$\downarrow \quad \downarrow$

$1 + 0 = 1$

Use the benchmarks, 0, $\frac{1}{2}$, and 1 to round each fraction.

Visual Model



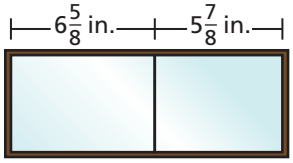
$\frac{7}{8} + \frac{1}{6}$ is about $1 + 0 = 1$.

Skill Examples

1. $\frac{3}{5} + \frac{3}{8}$ is about $\frac{1}{2} + \frac{1}{2} = 1$.
2. $\frac{5}{6} - \frac{5}{8}$ is about $1 - \frac{1}{2} = \frac{1}{2}$.
3. $\frac{9}{10} + \frac{4}{5}$ is about $1 + 1 = 2$.
4. $\frac{5}{12} - \frac{1}{16}$ is about $\frac{1}{2} - 0 = \frac{1}{2}$.

Application Example

5. Estimate the width of the window.



$6\frac{5}{8} + 5\frac{7}{8}$

$\downarrow \quad \downarrow$

$6\frac{1}{2} + 6 = 12\frac{1}{2}$

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

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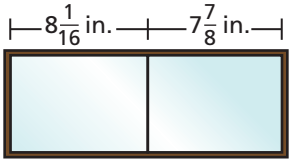
Check your answers at BigIdeasMath.com.

Estimate the sum or difference.

6. $\frac{5}{8} + \frac{1}{6}$ _____
7. $\frac{7}{12} + \frac{9}{10}$ _____
8. $\frac{1}{10} + \frac{9}{8}$ _____
9. $\frac{7}{6} + \frac{4}{5}$ _____
10. $\frac{9}{10} - \frac{5}{12}$ _____
11. $\frac{17}{8} - \frac{3}{5}$ _____
12. $\frac{13}{12} - \frac{1}{8}$ _____
13. $\frac{5}{2} - \frac{3}{5}$ _____
14. $1\frac{4}{5} + 2\frac{1}{8}$ _____
15. $2\frac{5}{6} + 3\frac{3}{5}$ _____
16. $5\frac{9}{10} - 4\frac{6}{10}$ _____
17. $1\frac{4}{5} - \frac{11}{14}$ _____

Estimate the width of the window.

18. 

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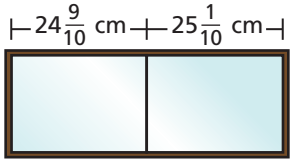
19. 

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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. _____

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?

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