REVIEW: Adding and Subtracting Fractions with Like Denominators

Name _____

Key Concept and Vocabulary

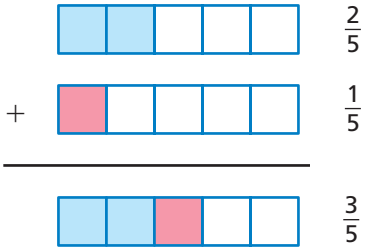
$$\frac{2}{5} + \frac{1}{5} = \frac{2+1}{5} = \frac{3}{5}$$

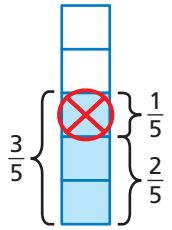
Like denominators

Add or subtract numerators.

$$\frac{3}{5} - \frac{1}{5} = \frac{3-1}{5} = \frac{2}{5}$$

Visual Models





$\frac{3}{5} - \frac{1}{5} = \frac{2}{5}$

Skill Examples

1. $\frac{4}{8} + \frac{3}{8} = \frac{4+3}{8} = \frac{7}{8}$
2. $\frac{3}{4} + \frac{1}{4} = \frac{3+1}{4} = \frac{4}{4} = 1$
3. $\frac{7}{10} - \frac{4}{10} = \frac{7-4}{10} = \frac{3}{10}$
4. $\frac{13}{25} - \frac{8}{25} = \frac{13-8}{25} = \frac{5}{25} = \frac{1}{5}$

Application Example

5. On Monday, you painted $\frac{2}{5}$ of a fence. On Tuesday, you painted the same amount. What fraction of the fence do you have left to paint?

$1 = \frac{5}{5}$ and $\frac{2}{5} + \frac{2}{5} = \frac{4}{5}$; $\frac{5}{5} - \frac{4}{5} = \frac{1}{5}$

∴ You have $\frac{1}{5}$ of the fence left to paint.

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Find the sum or difference.

6. $\frac{3}{6} + \frac{2}{6} =$ $\frac{5}{6}$
7. $\frac{6}{12} + \frac{5}{12} =$ $\frac{11}{12}$
8. $\frac{1}{10} + \frac{3}{10} =$ $\frac{4}{10}$, or $\frac{2}{5}$
9. $\frac{3}{4} + \frac{2}{4} =$ $\frac{5}{4}$
10. $\frac{3}{8} + \frac{1}{8} =$ $\frac{4}{8}$, or $\frac{1}{2}$
11. $\frac{1}{5} + \frac{2}{5} + \frac{2}{5} =$ $\frac{5}{5}$, or 1
12. $\frac{6}{8} - \frac{1}{8} =$ $\frac{5}{8}$
13. $\frac{2}{3} - \frac{1}{3} =$ $\frac{1}{3}$
14. $\frac{7}{4} - \frac{3}{4} =$ $\frac{4}{4}$, or 1
15. $\frac{9}{10} - \frac{7}{10} =$ $\frac{2}{10}$, or $\frac{1}{5}$
16. $\frac{10}{12} - \frac{3}{12} =$ $\frac{7}{12}$
17. $\frac{6}{6} - \left(\frac{1}{6} + \frac{2}{6}\right) =$ $\frac{3}{6}$, or $\frac{1}{2}$

Find the perimeter of the rectangle or triangle.

18. $\frac{1}{4}$ ft, $\frac{2}{4}$ ft

Perimeter = $\frac{6}{4}$, or $\frac{3}{2}$ ft

19. $\frac{2}{5}$ cm, $\frac{3}{5}$ cm

Perimeter = $\frac{10}{5}$, or 2 cm

20. $\frac{3}{8}$ in., $\frac{3}{8}$ in., $\frac{4}{8}$ in.

Perimeter = $\frac{10}{8}$, or $\frac{5}{4}$ in.

21. $\frac{2}{10}$ m, $\frac{4}{10}$ m, $\frac{3}{10}$ m

Perimeter = $\frac{9}{10}$ m

22. **REACHING YOUR GOAL** You have a savings goal. In January, you saved $\frac{2}{10}$ of your goal. In February, you saved $\frac{3}{10}$ of your goal. How much of your goal remains? Explain.

$\frac{1}{2}$ of your goal remains; $1 - \left(\frac{2}{10} + \frac{3}{10}\right) = \frac{10}{10} - \frac{5}{10} = \frac{5}{10} = \frac{1}{2}$