REVIEW: Adding and Subtracting Fractions with Like Denominators

Name _____

Key Concept and Vocabulary
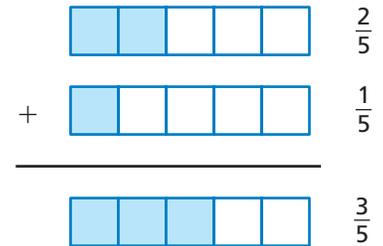
$$\frac{2}{5} + \frac{1}{5} = \frac{2+1}{5} = \frac{3}{5}$$

Like Denominators

Add or subtract numerators.

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

Visual Model

$$\frac{2}{5}$$

$+$ $$\frac{1}{5}$$

_____

$$\frac{3}{5}$$

Skill Examples

1. $\dfrac{3}{8} + \dfrac{3}{8} = \dfrac{3+3}{8} = \dfrac{6}{8} = \dfrac{3}{4}$

2. $\dfrac{3}{4} + \dfrac{1}{4} = \dfrac{3+1}{4} = \dfrac{4}{4} = 1$

3. $\dfrac{7}{10} - \dfrac{4}{10} = \dfrac{7-4}{10} = \dfrac{3}{10}$

4. $\dfrac{13}{25} - \dfrac{8}{25} = \dfrac{13-8}{25} = \dfrac{5}{25} = \dfrac{1}{5}$

Application Example

5. On Monday, you painted two-fifths of a house. On Tuesday, you painted the same amount. How much is left?

$$\frac{5}{5} - \left(\frac{2}{5} + \frac{2}{5} \right) = \frac{5}{5} - \frac{4}{5} = \frac{1}{5}$$

You have one-fifth left to paint.

PRACTICE MAKES *PURR*-FECT™

Check your answers at BigIdeasMath.com.

Find the sum or difference. Write your answer in simplified form.

6. $\dfrac{1}{9} + \dfrac{2}{9} = \underline{\dfrac{1}{3}}$

7. $\dfrac{6}{11} + \dfrac{5}{11} = \underline{1}$

8. $\dfrac{1}{10} + \dfrac{3}{10} = \underline{\dfrac{2}{5}}$

9. $\dfrac{3}{4} + \dfrac{2}{4} = \underline{1\dfrac{1}{4}}$

10. $\dfrac{3}{8} + \dfrac{1}{8} = \underline{\dfrac{1}{2}}$

11. $\dfrac{1}{5} + \dfrac{2}{5} + \dfrac{2}{5} = \underline{1}$

12. $\dfrac{5}{8} - \dfrac{1}{8} = \underline{\dfrac{1}{2}}$

13. $\dfrac{6}{7} - \dfrac{3}{7} = \underline{\dfrac{3}{7}}$

14. $\dfrac{7}{9} - \dfrac{4}{9} = \underline{\dfrac{1}{3}}$

15. $\dfrac{9}{10} - \dfrac{7}{10} = \underline{\dfrac{1}{5}}$

16. $\dfrac{5}{6} - \dfrac{2}{6} = \underline{\dfrac{1}{2}}$

17. $\dfrac{6}{6} - \left(\dfrac{1}{6} + \dfrac{2}{6} \right) = \underline{\dfrac{1}{2}}$

Find the perimeter of the rectangle or triangle.

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

Perimeter = $1\dfrac{1}{2}$ ft

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

Perimeter = 2 cm

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

Perimeter = $1\dfrac{1}{4}$ in.

21. Triangle: $\frac{4}{10}$ m, $\frac{2}{10}$ m, $\frac{3}{10}$ m
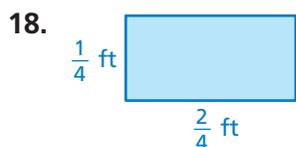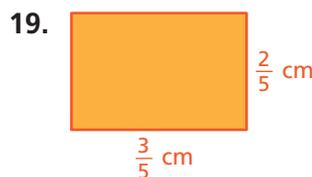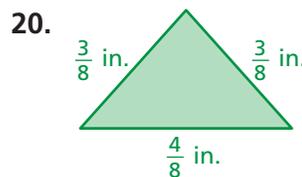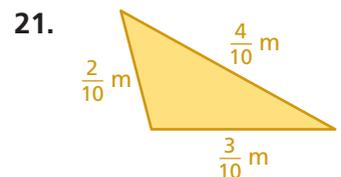
Perimeter = $\dfrac{9}{10}$ m

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

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