

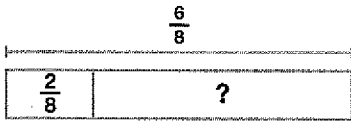


Homework 11-5

Subtracting Fractions with Like Denominators

Another Look!

Flora needs an additional $\frac{2}{8}$ cup flour to make her dough. The dough recipe calls for $\frac{6}{8}$ cup flour. How many cups of flour does Flora have?



Strip diagrams can help you show the problem.



Subtract the numerators. Write the difference over the like denominator.

$$\frac{6}{8} - \frac{2}{8} = \frac{4}{8}$$

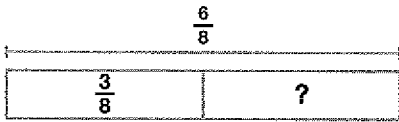
Write the difference in simplest form.

$$\frac{4 \div 4}{8 \div 4} = \frac{1}{2}$$

Flora has $\frac{1}{2}$ cup flour.

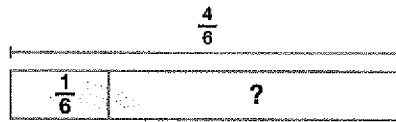
In 1 through 14, subtract the fractions. Simplify, if possible.

1.



$$\frac{6}{8} - \frac{3}{8}$$

2.



$$\frac{4}{6} - \frac{1}{6}$$

3. $\frac{4}{5} - \frac{3}{5}$

4. $\frac{8}{12} - \frac{3}{12}$

5. $\frac{3}{6} - \frac{1}{6}$

6. $\frac{9}{10} - \frac{3}{10}$

7. $\frac{11}{12} - \frac{5}{12}$

8. $\frac{5}{6} - \frac{1}{6}$

9. $\frac{97}{100} - \frac{40}{100}$

10. $\frac{5}{8} - \frac{1}{8}$

11. $\frac{19}{20} - \frac{10}{20}$

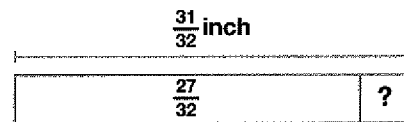
12. $\frac{7}{12} - \frac{4}{12}$

13. $\frac{56}{100} - \frac{1}{100}$

14. $\frac{8}{8} - \frac{1}{8}$

15. **Math and Science** If one of your parents has cheek dimples, you may inherit cheek dimples. In a class of 24 students, 10 students have at least one parent with dimples. Suppose 4 of these students have dimples. What fraction of the class has dimples?

16. **Number Sense** An engineer was supposed to draw a line exactly $\frac{27}{32}$ inch long. An error was made, and he drew the line $\frac{31}{32}$ inch. How much longer was the line that the engineer drew?



17. **Number Sense** Jonah is thinking of a 2-digit number. It is a multiple of 6 and 12. It is a factor of 108. The sum of its digits is 9. What number is Jonah thinking of?

18. In a bag of 100 balloons, 12 are red and 13 are green. What fraction of the balloons in the bag are **NOT** red or green?

- A $\frac{1}{4}$
 B $\frac{1}{2}$
 C $\frac{3}{4}$
 D 1

You know it is a multiple of 12. That is a good place to start.



19. **Represent** A mosaic wall is divided into 50 equal sections. If 15 sections are reserved for orange tiles and 20 sections are reserved for blue tiles, what fraction of the mosaic wall is left for other colors?



20. **Extend Your Thinking** Diego compared the differences $\frac{10}{10} - \frac{1}{10}$ and $\frac{100}{100} - \frac{10}{100}$. He said that the simplified form of the differences both equal $\frac{9}{10}$. Is Diego correct? If so, how are these expressions related?