

**Additional Practice 7-7****Use Models to Add Mixed Numbers****Another Look!**

Draw a model to add $1\frac{7}{8} + 2\frac{1}{4}$.

Remember that you can use what you know about adding fractions to help you add mixed numbers.

**Step 1**

Model each addend using fraction strips.



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



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

Step 2

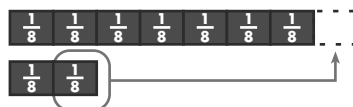
Add the fractions. Regroup if possible.

$$\begin{array}{r} \frac{7}{8} \\ + \frac{2}{8} \\ \hline \end{array}$$

$$\frac{9}{8} = 1\frac{1}{8}$$

$$\frac{8}{8} = 1$$

$\frac{1}{8}$ left

**Step 3**

Add the whole numbers to the regrouped fractions. Write the sum.

$$\text{So, } 1\frac{7}{8} + 2\frac{1}{4} = 3\frac{9}{8} = 4\frac{1}{8}.$$



In 1–12, use fraction strips to find each sum.

1. $3\frac{1}{2} + 1\frac{4}{8}$

2. $2\frac{5}{12} + 4\frac{1}{4}$

3. $3\frac{3}{4} + 3\frac{1}{2}$

4. $2\frac{5}{8} + 4\frac{3}{4}$

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

6. $2\frac{1}{2} + 6\frac{3}{4}$

7. $3\frac{1}{4} + 4\frac{7}{8}$

8. $4\frac{5}{6} + 5\frac{7}{12}$

9. $2\frac{1}{4} + 4\frac{5}{8}$

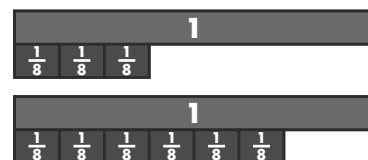
10. $6\frac{1}{2} + 7\frac{3}{4}$

11. $4\frac{5}{8} + 6\frac{1}{2}$

12. $2\frac{1}{3} + 4\frac{5}{12}$



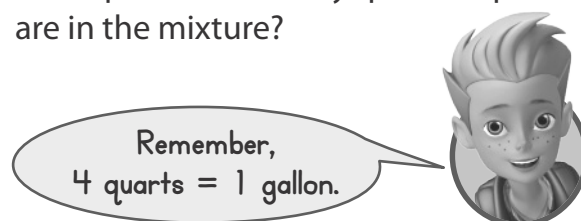
13. Ken used $1\frac{3}{8}$ cups of walnuts and $1\frac{3}{4}$ cups of raisins to make trail mix. How many total cups of trail mix did he make?



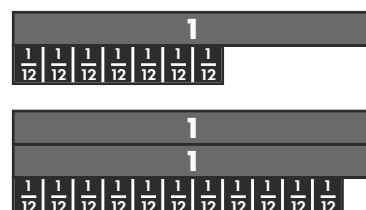
14. Ken added $\frac{5}{8}$ cup more walnuts to the trail mix. How many cups of trail mix does he have?

15. **Higher Order Thinking** Kayla walked $1\frac{1}{4}$ miles from home to school. Then, she walked $1\frac{3}{4}$ miles from school to the store and $2\frac{1}{2}$ miles from the store to the library. How many miles did Kayla walk from school to the library?

16. A painter mixes $\frac{1}{4}$ gallon of red paint, 3 quarts of yellow paint, and 2 quarts of white paint. How many quarts of paint are in the mixture?



17. **Model with Math** Rachel has a board that is $1\frac{7}{12}$ feet long and another board that is $2\frac{11}{12}$ feet long. Write an expression Rachel can use to find the total length in feet of the two boards.



18. Lori went to the movies. She spent \$9.50 for a movie ticket, \$5.50 for a box of popcorn, and \$2.25 for a drink. How much did Lori spend in all? Show your work.

19. **Construct Arguments** Jane is adding $3\frac{1}{4} + 2\frac{7}{8}$ using fraction strips. How can she rename the sum of the fraction parts of the problem? Explain your thinking.



Assessment Practice

20. McKenna spends $1\frac{3}{4}$ hours mopping the floors and $3\frac{3}{8}$ hours mowing and weeding the yard. How many hours does she spend on her chores?
- (A) 4 hours
(B) $4\frac{1}{8}$ hours
(C) 5 hours
(D) $5\frac{1}{8}$ hours
21. Jackie's rain gauge showed $2\frac{2}{5}$ inches on April 15 and $5\frac{2}{10}$ inches on April 30. How many inches of rain fell on those two days?
- (A) 7 in.
(B) $7\frac{6}{10}$ in.
(C) $7\frac{4}{5}$ in.
(D) 8 in.