

Name _____

Problem Solving • Practice Addition and Subtraction



COMMON CORE STANDARD—5.NF.A.2
Use equivalent fractions as a strategy to add and subtract fractions.

Read each problem and solve.

1. From a board 8 feet in length, Emmet cut two $2\frac{1}{3}$ -foot bookshelves. How much of the board remained?

Write an equation: $8 = 2\frac{1}{3} + 2\frac{1}{3} + x$

Rewrite the equation to work backward:

$$8 - 2\frac{1}{3} - 2\frac{1}{3} = x$$

Subtract twice to find the length remaining: $3\frac{1}{3}$ feet

2. Lynne bought a bag of grapefruit, $1\frac{5}{8}$ pounds of apples, and $2\frac{3}{16}$ pounds of bananas. The total weight of her purchases was $7\frac{1}{2}$ pounds. How much did the bag of grapefruit weigh?

3. Mattie's house consists of two stories and an attic. The first floor is $8\frac{5}{6}$ feet tall, the second floor is $8\frac{1}{2}$ feet tall, and the entire house is $24\frac{1}{3}$ feet tall. How tall is the attic?

4. It is $10\frac{3}{5}$ miles from Alston to Barton and $12\frac{1}{2}$ miles from Barton to Chester. The distance from Alston to Durbin, via Barton and Chester, is 35 miles. How far is it from Chester to Durbin?

5. Marcie bought a 50-foot roll of packing tape. She used two $8\frac{5}{6}$ -foot lengths. How much tape is left on the roll?

6. **WRITE** *Math* Write a word problem involving fractions for which you would use the *work backward* strategy and addition to solve. Include your solution.

Lesson Check (5.NF.A.2)

1. Paula spent $\frac{3}{8}$ of her allowance on clothes and $\frac{1}{6}$ on entertainment. What fraction of her allowance did she spend on other items?
2. Della bought a tree seedling that was $2\frac{1}{4}$ feet tall. During the first year, it grew $1\frac{1}{6}$ feet. After two years, it was 5 feet tall. How much did the seedling grow during the second year?

Spiral Review (5.OA.A.1, 5.NBT.A.2, 5.NBT.B.6, 5.NF.B.7)

3. What is a way to write 100,000 using exponents?
4. What expression can be used for estimating $868 \div 28$?

5. Justin gave the clerk \$20 to pay a bill of \$6.57. How much change should Justin get?
6. What is the value of the following expression?

$$7 + 18 \div (6 - 3)$$
