Applying Your Subtraction Skills

Subtraction problems ask you to figure out what is *left* after you take something away or to find how much something *increases* or *decreases.*

Solve and write the correct label, such as inches or pounds, next to each answer. Reduce each answer to lowest terms.

1. From a board $38\frac{1}{2}$ inches long, Pete cut a piece $17\frac{5}{8}$ inches long. How long was the remaining piece?

2. Jeff weighed 166 pounds. He went on a diet and lost $11\frac{3}{4}$ pounds. How much did Jeff weigh after his diet?

3. Before leaving on a weekend trip, Mr. Green noticed that his mileage gauge registered $20{,}245\frac{3}{10}$ miles. When he returned home, the gauge registered $20{,}734\frac{7}{10}$ miles. How many miles did Mr. Green drive that weekend?

4. Adrienne had a piece of cloth 5 yards long. She used $1\frac{2}{3}$ yards to make a new curtain for her bathroom. How long was the remaining piece of cloth?

5. From a 10-foot long pipe, Shirley cut a section $1\frac{11}{12}$ feet long to repair her kitchen drain. How long was the piece of pipe that was left?

6. Tom changed the rotating speed of his cement mixer from $6\frac{1}{3}$ rpm's to 10 rpm's. By how many revolutions per minute did the speed of the mixer increase?

7. From a 100-pound bag of cement, Fred used $44\frac{5}{8}$ pounds to make concrete. How much cement was left in the bag?

8. Esther bought a $\frac{3}{4}$-pound bar of baking chocolate. If she used $\frac{5}{8}$ pound of chocolate to make a cake, how much chocolate was left?

Read each of the following problems carefully to decide whether to add or to subtract.

Mr. Alonso bought 60 feet of nylon rope. To tie a mattress to the roof of his car, he used $18\frac{2}{3}$ feet of the rope. Then to pitch a tent for his son, he used $24\frac{1}{2}$ feet of rope.

9. How much rope did Mr. Alonso use to tie the mattress to the roof of his car and to pitch the tent?

10. After Mr. Alonso used the two pieces of rope, how much rope was left from the original 60 feet?

Mary ran $2\frac{3}{4}$ miles on Monday, $3\frac{3}{8}$ miles on Wednesday, and $1\frac{5}{8}$ miles on Friday.

11. How many miles did Mary run this week?

12. Mary tries to run 10 miles each week. How many more miles does Mary need to run to complete 10 miles?

A town needs \$3 million for a new recreation center. So far the town has received $\$\frac{3}{4}$ million from private gifts, $\$1\frac{1}{8}$ million from a state grant, and $\$\frac{1}{2}$ million from a federal grant.

13. What total amount has the town received so far?

14. How much more money does the town need to reach its goal?

An airline allows carry-on bags with a combined length plus width plus height of no more than 37 inches.

15. Selma's bag is $15\frac{3}{4}$ inches long, $9\frac{1}{2}$ inches wide, and $12\frac{7}{8}$ inches high. Does her bag fit within the guidelines for carry-on bags?

16. Bill's bag is $16\frac{1}{2}$ inches long, $8\frac{5}{8}$ inches wide, and $11\frac{3}{8}$ inches high. Does his bag fit within the airline's guidelines for carry-on bags?