SKILL 9: PROBLEM SOLVING: Deciding When to Add or Subtract

Sometimes you must decide which operation to use to solve a problem.

Example

Jan and Bobby went bowling on a Saturday afternoon. Bobby's scores were 98, 134, and 125. Jan's scores were 112, 208, and 99. Who had the greater total score?

Read You are given Jan's scores and Bobby's scores.

Plan You need to find out whose total score was greater.

Solve Decide what operation makes sense. Find Bobby's and Jan's total scores. To find a total of two or more numbers, add.

Bobby's scores $98 + 134 + 125 = 357$

Jan's scores $112 + 208 + 99 = 419$

Since $419 > 357$, Jan's total score was greater.

Look Back See that your answer makes sense. Each of Bobby's scores is about 100. So $3 \times 100 = 300$ is an estimate of his total. Jan's total is about $100 + 200 + 100 = 400$. $400 > 300$, so it makes sense that Jan's score is greater.

Guided Practice

Solve each problem.

1. Marcia and Peter traveled 366 miles on their first day of vacation. The second day they traveled 486 miles. How many miles did they travel in those two days?

   Add: _____

2. Karen and Sue run 2 miles every day. Karen has run 486 miles. Sue has run 366 miles. How many more miles has Karen run than Sue?

   Subtract: _____

3. June read a 576-page book one week and a 328-page book the next. How many pages did she read in all?

   _____

4. For exercise, Cheryl jogs 5,280 yards and walks 3,085 yards. How much farther does she jog than she walks?

   _____

SKILL 9: Practice

Write the letter of the number sentence you would use.

1. The deluxe soccer gear set costs $55. The regular soccer set costs $27. What is the difference in cost between the two sets? _____

   a. $27 + $55 = $82

   b. $55 − $27 = $28

   c. $27 + $82 + $55 = $164

Solve each problem.

2. The special chess set is $14 less than the deluxe chess set, which costs $68. How much is the special chess set? _____

3. Brandon planned on using $83 to buy the deluxe chess set. He wanted to use his leftover money to buy a book on chess strategy, which costs $12. How much money will Brandon have left? _____

4. Brianna has $34 in babysitting money plus $12 allowance. She would also like to buy the deluxe chess set. How much more money will she need? _____

5. Steven and his sister Jenna want to buy a gift that costs $54 for their parents. Steven has $15 and Jenna has $24. Do they have enough money to buy the gift? If not, how much more money do they need? _____

6. Ruth's calculator read 41,687. She subtracted a number to get 18,943. What number did she subtract? _____

7. Keshawna bought a bike on sale for $189, a bike lock for $9, and handlebar grips also on sale for $15. The sale prices were saving her $67. How much did she spend in all? _____

TEST PREP

8. A scientist at the Elk Refuge tagged 38 bull elk and 112 cow elk. How many more cows did the scientist tag than bulls?

   Skill 9

   A 74 cows   C 126 cows

   B 86 cows   D 150 cows

9. Carlos has 135 baseball cards, 86 basketball cards, and 52 football cards. How many sports cards does he have in all?

   Skill 7

   F 163 cards   H 263 cards

   G 173 cards   J 273 cards