



SKILL 8: PROBLEM SOLVING: Adding and Subtracting Decimals

When solving word problems involving addition or subtraction of decimals, it is important that you know when to add and when to subtract.

Example

The table shows that Fu Mingxia won the gold medal for platform diving in both 1992 and 1996. In 1996, she improved her score by 60.15 points. Find her 1996 score.

Read What are the key facts?

Plan Are you going to add or subtract?

Her score was 60.15 higher,
so add 461.43 and 60.15.

Solve Add.

$$\begin{array}{r} 461.43 \leftarrow \text{1992 score} \\ + 60.15 \leftarrow \text{Increase in score} \\ \hline 521.58 \leftarrow \text{1996 score} \end{array}$$

Mingxia's 1996 score was 521.58 points.

Look Back See whether your answer makes sense.

Mingxia's 1996 score was higher than her 1992 score.
521.58 is greater than 461.43. The answer makes sense.

**Olympic Platform Diving
Gold Medal Winners**

Year	Diver	Points
1984	Zhou Jihong	435.51
1988	Xu Yanmel	445.20
1992	Fu Mingxia	461.43
1996	Fu Mingxia	

Guided Practice

**Compare Yanmel's 1988 score and Jihong's 1984 score.
How many more points did Yanmel score?**

- How many points did Yanmel score? _____
- How many points did Jihong score? _____
- Will you add or subtract to find how many more points Yanmel scored? _____
- How many more points did Yanmel score? _____

In springboard diving, Gao Min scored 580.23 points in 1988 and 572.40 points in 1992.

- In which year did she score fewer points? _____
- How many fewer points? _____

SKILL 8: Practice**Solve each problem.**

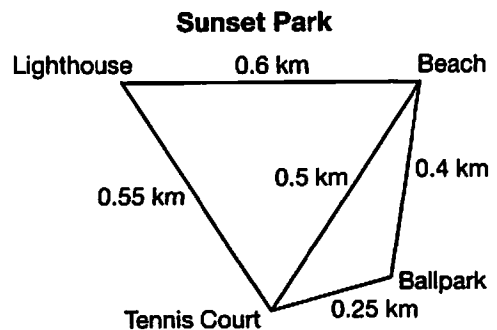
The table shows record catches for freshwater fish.

1. What is the difference between the weight of the trout and the weight of the whitefish? _____
2. How much more did the bass weigh than the catfish? _____
3. Brian caught three brook trout that weighed 4.8 pounds, 3.54 pounds, and 2.71 pounds. What was the total weight of the three fish? _____
4. How much more did the record brook trout weigh than the three trout that Brian caught? _____

Record Fish Weights	
Largemouth Bass	22.25 lb
White Catfish	18.875 lb
Sockeye Salmon	15.1875 lb
Brook Trout	14.5 lb
Lake Whitefish	14.375 lb

Use the map at the right.

5. How far is it from the tennis court to the beach by way of the ballpark? _____
6. How much shorter is the direct path from the tennis court to the beach than going to the beach by way of the ballpark? _____
7. How far is it around Sunset Park using the four outside paths? _____



The odometer readings (in miles) on Mr. Quinlin's car are shown at the beginning of a trip and at the end of a trip.

8. How far did he drive? Skill 8
 A 545.7 mi C 544.7 mi
 B 534.7 mi D 5,150.5 mi

Beginning: **1 2 3 0 2 . 9**End: **1 2 8 4 7 . 6**

9. What is his ending reading rounded to the nearest whole mile? Skill 4

F 12,847

H 12,850

G 12,848

J 12,847.6