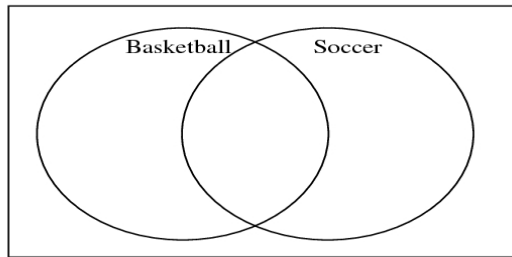## Problem Solving Using Venn Diagrams

Venn diagrams are a powerful problem-solving tool. Use the Venn diagrams provided to solve the following problems. Write the appropriate numbers in each region.

Problem 1

Student athletes were surveyed to see whether they played basketball, soccer, or both. Of 100 students surveyed,
56 played basketball
24 played both basket ball and soccer
68 played soccer

How many played basketball only?

How many played soccer only?

Problem 2

A school is taking three music organizations to a festival.

30 students sing in the choir
40 students play in the orchestra
50 students march in the band
15 students belong to the choir and
    the orchestra
10 students belong to the orchestra
    and the band
14 students belong to the choir and
    the band
5 students belong to all three groups

How many students will need seats on the bus?

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