## Solving a Problem about Ticket Prices

It was reported in March 2004 that during the National Hockey League and National Basketball Association seasons, two hockey tickets and one basketball ticket purchased at their average prices would have cost $126.77. One hockey ticket and two basketball tickets would have cost $128.86. What were the average ticket prices for the two sports? (*Source:* Team Marketing Report, Chicago.)

*Step 1* **Read** the problem again. There are two unknowns.

*Step 2* **Assign variables.**

$$\text{Let } h = \text{ the average price for a hockey ticket}$$
$$\text{and } b = \text{ the average price for a basketball ticket.}$$

*Step 3* **Write a system of equations.** Because two hockey tickets and one basketball ticket cost a total of $126.77, one equation for the system is

$$2h + b = 126.77.$$

By similar reasoning, the second equation is

$$h + 2b = 128.86.$$

*Step 4* **Solve** the system.

*Step 5* **State the answer.**

*Step 6* **Check**