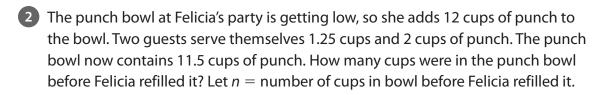# Writing and Solving One-Variable Equations

➤ **Solve each problem by writing and solving a one-variable equation.**

1 In the first three innings of a baseball game, the home team scored some runs. In the rest of the game, they scored 5 runs more than the number of runs scored in the first three innings. If the home team scored 9 runs in all, how many runs did they score during the first three innings? How many runs did they score in the remainder of the game? Let $x =$ the runs scored in the first three innings.

2 The punch bowl at Felicia's party is getting low, so she adds 12 cups of punch to the bowl. Two guests serve themselves 1.25 cups and 2 cups of punch. The punch bowl now contains 11.5 cups of punch. How many cups were in the punch bowl before Felicia refilled it? Let $n =$ number of cups in bowl before Felicia refilled it.

3 Vanessa is a caterer. She made several batches of appetizers last weekend for an event. This weekend, Vanessa made 4 times as many batches. She made a total of 25 batches of appetizers for the two weekends. Determine the number of batches Vanessa made last weekend and the number of batches she made this weekend. Let $b =$ the number of batches of appetizers Vanessa made last weekend.

Writing and Solving One-Variable Equations *continued*

4 Wanda earned $350 babysitting over the months of July and August. She earned $90 more in August than in July. How much did she earn babysitting in July? In August?

5 Charlene is 8 years older than Aaron. The sum of their ages is 44. What are their ages?

6 On Saturday, 45% of the music Brianna listened to was country songs. She listened to 27 country songs on Saturday. How many songs did Brianna listen to on Saturday?