## Problem Solving Strategy Use Logical Reasoning

Use logical reasoning to solve.

- 1. Mark, Tina, Nick, and Julio each buy a different-colored pen at the bookstore. The colors are blue, red, yellow, and green. Nick's and Julio's pens are colors on the United States' flag. Tina's pen is bright like the sun, and Julio's is the color of the sky. Which pen did each person buy?
- 2. Five students, Maria, Ivan, Leah, Julie, and Scott measured each other's heights for health class. The heights are 42, 39, 41, 37, and 39 inches. Julie is 2 inches shorter than Leah. Maria is 1 inch shorter than Scott and 2 inches taller than Leah. How tall is each student?

## **Mixed Review**

- 3. Four friends each contributed either a main course, a vegetable, a salad, or a dessert to a potluck dinner. Suzanne brought something sweet. Brandon did not bring the broccoli. Marta brought the salad, and Eddie brought something green. Who brought the main course?
- 4. The soccer, tennis, football, and track seasons are all different lengths. The lengths are 10, 12, 16, and 18 weeks. The soccer season is 6 weeks longer than the tennis season. The track season is 6 weeks shorter than the football season. The tennis season is 2 weeks shorter than the track season and 8 weeks shorter than the football season. Which season lasts 12 weeks?
- 5. Marsha bought a mountain bike on sale for \$112.56 plus \$6.75 tax.
  The regular price was \$149.99, including tax. How much did Marsha save?
- 6. Last winter it snowed 12.9 cm in December, 17.4 cm in January, 16.9 cm in February, and 8.6 cm in March. In which month did the most snow fall?