1. Kerry asked a bank teller to cash a $390 check using $20 bills and $50 bills. If the teller gave her a total of 15 bills, how many of each type of bill did she receive?

2. Two isosceles triangles have the same base length. The legs of one of the triangles are twice as long as the legs of the other. Find the lengths of the sides of the triangles if their perimeters are 23 cm and 41 cm.

3. A grain-storage warehouse has a total of 30 bins. Some hold 20 tons of grain each, and the rest hold 15 tons each. How many of each type of bin are there if the capacity of the warehouse is 510 tons?

4. With a tail wind, a helicopter traveled 300 miles in 1 hour and 40 minutes. The return trip against the same wind took 20 minutes longer. Find the wind speed and also the air speed of the helicopter.

5. With a head wind, a plane traveled 1000 miles in 4 hours. With the same wind as a tail wind, the return trip took 3 hours and 20 minutes. Find the plane's air speed and the wind speed.

6. An international phone call is charged at one rate (a fixed amount) for the first minute and at a different second rate for each additional minute. If a seven-minute call costs $10 and a four-minute call costs $6.40, what are the two rates?

7. A caterer's total cost for catering a party includes a fixed cost (it is the same for every party). In addition, the caterer charges a certain amount for each guest. If it costs $300 to serve 25 guests and $420 to serve 40 guests, what are the fixed cost and the cost per guest?

8. Marcia flew her ultralight plane to a nearby town against a head wind of 15 km/h in 2 hours and 20 minutes. The return trip under the same wind conditions took 1 hour and 24 minutes. What was the plane's air speed and what was the distance to the nearby town?