

Give a system of equations that can be used to solve each problem.

In Exercises 3–6 use n , d , and q for the number of nickels, the number of dimes, and the number of quarters, respectively.

- Sam has 30 nickels and dimes worth \$2.40. How many nickels does he have?
- Kelley has 24 dimes and quarters worth \$3.60. How many quarters does she have?
- Bruce has \$5.50 in dimes and quarters. He has 8 more quarters than dimes. How many quarters does he have?
- Luis and Julia have the same number of coins. Luis has only dimes and Julia has only quarters. If Julia has \$1.80 more than Luis does, how many coins does each have?

In Exercises 7–12, use whatever variables seem appropriate.

- Dick and Connie purchased a radio for \$128. Dick paid \$36 more than Connie. How much did each pay?
- Annette and June bowled together and had a combined score of 425. June's score was 25 less than Annette's score. Find their scores.
- Steve has \$3 more than twice as much as Tracy. Together they have \$57. How much does each have?
- The length of a rectangle is 5 cm less than three times its width. If the perimeter is 70 cm, find the dimensions.
- A radio station broadcasts programs and commercials 20 hours everyday. The ratio of the time spent on commercials to the programming time is 1:4. How much time each day does the station spend broadcasting commercials?
- A person invests \$5000 in treasury notes and bonds. The notes pay 8% annual interest and the bonds pay 10% annual interest. If the annual income is \$480, how much is invested in treasury notes?

