

## Solving Verbal Problems Leading to Linear Equations

Solve each problem algebraically.

1. The Spartans won five games less than twice the number they lost. If they played 25 games, how many games did they win?
2. In a class, the number of students who passed a test was 6 more than 3 times the number who failed. If there were 30 students in the class, how many students passed?
3. Sandy is twice as old as Mary. The sum of their ages is 18 less than three times Sandy's age. How old are Mary and Sandy?
4. Bill has twice as much money as Bob. Paul has \$12 more than Bill. Together, they have \$92. How much money does Bill have?
5. Joe is 18 years older than Sam. In 16 years, Sam will be half the age that Joe will be. How old are Joe and Sam now?
6. At a university-sponsored concert, there were three times as many females as males. A total of 600 people attended the concert. How many males and how many females attended?
7. Emily has a sack filled with 200 marbles. She has twice as many red marbles as blue. She has 100 fewer green marbles than red. How many of each color marble does she have?
8. There are only three flavors of gumdrops in a jar containing 40 gumdrops. There are 3 times as many cherry gumdrops as lemon gumdrops. There are 4 more than twice as many orange gumdrops as lemon gumdrops. How many gumdrops of each flavor are in the jar?