**Solution 1.34**

Durco Automotive needs a $1 million balance in its contingency fund 3 years from now. The CFO (chief financial officer) wants to know how much to deposit now into Durco’s high-yield investment account. Determine the amount if it grows at a rate of 20% per year (a) simple interest, and (b) com­pound interest.

*Solution:*

(a) F = P + Pni

1,000,000 = P + P(3)(0.20)

1.60P = 1,000,000

P = $625,000

(b) P(1+i)(1+i)(1+i) = 1,000,000

P = 1,000,000/[(1+0.20)(1+0.20)(1+0.20)]

= $578,704