**Solution 1.37**

(a) At a simple interest rate of 12% per year, deter­mine how long it will take $5000 to increase to twice as much. (b) Compare the time it will take to double if the rate is 20% per year simple interest.

*Solution:*

(a) F = P + Pni

10,000 = 5000 + 5000(n)(0.12)

5000 = 600n

n = 8.33 years

(b) 10,000 = 5000 + 5000(n)(0.20)

n = 5 years