

**Problem 1.16**

A new engineering graduate who started a consulting business borrowed money for 1 year to furnish the office. The amount of the loan was \$45,800, and it had an interest rate of 10% per year. However, because the new graduate had not built up a credit history, the bank made him buy loan-default insurance that costs \$900. In addition, the bank charged a loan set-up fee of 1% of the loan principal. What was the effective interest rate the engineer paid for the loan?