A balloon mortgage is a mortgage that is amortized over a period that is longer than the term of the loan, leaving a large final payment due at maturity. The final payment is called a balloon payment.

## EXAMPLE 4 Analyzing the Cost of a Balloon Mortgage

You take out a 10 -year balloon mortgage for $\$ 250,000$. The monthly payment is equal to that of a 30 -year mortgage with an annual percentage rate of $6 \%$. Find the balloon payment and the total interest that you pay.

## SOLUTION

From Example 1(b), the monthly payment for a 30 -year mortgage for $\$ 250,000$ with an annual percentage rate of $6 \%$ is $\$ 1498.88$. Use a spreadsheet to amortize the mortgage for 10 years using this monthly payment.


After making 120 payments, you must make a balloon payment of $\$ 209,214.31$.

## Study Tip

A balloon mortgage lets you make small monthly payments, but at the end of the mortgage you must make a large final payment.

The total interest that you pay over the 10 years is $\$ 139,079.47$.

## Checkpoint

Help at Math.andY@U.com

You take out a 5 -year balloon mortgage for $\$ 200,000$. The monthly payment is equal to that of a 20 -year mortgage with an annual percentage rate of $6.5 \%$. Find the balloon payment and the total interest that you pay.

