Chap 7 Day 11 Amortization Schedule

An amortization table is a listing of the unpaid principal, the monthly payment, the amount allocated to paying down the principal, and the amount allocated to interest. You can sent up your own spreadsheet to generate the amortization table. First, set up rows 1-7 of the spreadsheet and then input the necessary data.

To practice, enter the below information into your own spreadsheet.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | A | B | C | D | E |
| 1 | **Purchase Price** | $300,000 |  |  |
| 2 | **Down Payment** | $60,000 |  |  |
| 3 | **Loan Amount** | $240,000 |  |  |
| 4 | **Interest Rate as a Decimal** | .04 |  |  |
| 5 | **Length of loan (years)** | 30 |  |  |
| 6 | **Monthly Payment** |  |  |  |
| 7 |  |  |  |  |  |
| 8 | **Payment** **Number** | **Beginning Balance** | **Towards Interest** | **Towards Principal** | **Ending Balance** |

For the Monthly Payment, cell C6, use the Monthly Payment Formula:

**=(C3\*(C4/12)\*(1+C4/12)^(C5\*12))/((1+C4/12)^(C5\*12)-1)**”

Next, determine the information that you will need in the table. It should contain the payment number, the beginning balance, the monthly payment, the amounts allocated towards principal and interest, and the ending balance as shown in row 9.

***Row 9 contains the formulas needed to generate the table\****

|  |  |  |
| --- | --- | --- |
| A9 | 1 | Begin with number 1. |
| B9 | =C3 | The beginning balance is the principal (or loan amount) |
| C9 | =B9\*(C4/12) | This is the interest formula. |
| D9 | =C6-C9 | The monthly payment less the interest. |
| E9 | =B9-D9 | The ending balance is the beginning balance minus the amount towards principal.  |

Set up row 10 so it can be copied into subsequent rows (filled down). Remember, when copying formulas, the spreadsheet advances the cell address in the formula down by one row. If you add $ to the cell address, it won't change when copying. The entries in row 10 should be as follows:

|  |  |  |
| --- | --- | --- |
| A10 | =A9+1 | This will add 1 to each payment number. |
| B10 | =E9 | The beginning balance is last month’s ending balance. |
| C10 | =B10\*($C$4/12) | Put $ in the cell address to keep it from changing.  |
| D10 | =$C$6-C10 | Again, add $ to keep cell address fixed since monthly payment remains the same. |
| E10 | =B10-D10 |  |