

## Mathematical Agreement: Terms and Conditions: Periodic Payments

### Question

1. A person deposits \$1000 in a bank account that earns a nominal annual interest rate of 6% compounded annually.

Initial deposit  
Compounded annually: \$1000, 6%, 1, 1000, 60, 1060

Second year  
Compounded annually: 1060, 6%, 1, 1123.60, 67.416, 1191.016

Third year  
Compounded annually: 1191.016, 6%, 1, 1262.477, 77.4606, 1339.9376

Fourth year  
Compounded annually: 1339.9376, 6%, 1, 1419.3338, 84.5900, 1499.9238

Fifth year  
Compounded annually: 1499.9238, 6%, 1, 1589.9192, 90.5954, 1679.5146

Sixth year  
Compounded annually: 1679.5146, 6%, 1, 1776.2855, 100.7771, 1877.0626

Seventh year  
Compounded annually: 1877.0626, 6%, 1, 1979.6863, 112.2208, 2091.9071

Eighth year  
Compounded annually: 2091.9071, 6%, 1, 2199.4215, 125.9153, 2325.3368

Ninth year  
Compounded annually: 2325.3368, 6%, 1, 2444.8570, 141.9204, 2586.7774

Tenth year  
Compounded annually: 2586.7774, 6%, 1, 2709.9840, 160.6082, 2870.5922

Summary/Conclusion  
Compounded annually for 10 years at 6% interest rate. Amount of money after 10 years: 2870.5922