Calculating Doubling Time

You are to start with $100.00 in the bank at 10% compounded annually. Calculate how long it will take for you to reach $200.00. This is known as the Doubling Time. Use Table 1 below.

Table 1

|  |  |  |  |
| --- | --- | --- | --- |
| Time | Capital | Amount of Interest | Amount at the end of the year |
| Start of Year 1 | $100 at 10% | $10.00 | $110 |
| Start of Year 2 |  |  |  |
| Start of Year 3 |  |  |  |
| Start of Year 4 |  |  |  |
| Start of Year 5 |  |  |  |
| Start of Year 6 |  |  |  |
| Start of Year 7 |  |  |  |
| Start of Year 8 |  |  |  |

Answer is between the 7th and 8th year.

Now recalculate the Doubling Time with 5% interest in Table 2.

Table 2

|  |  |  |  |
| --- | --- | --- | --- |
| Time | Capital | Amount of Interest | Amount at the end of the year |
| Start of Year 1 | $100 at 5% | $5.00 | $105 |
| Start of Year 2 |  |  |  |
| Start of Year 3 |  |  |  |
| Start of Year 4 |  |  |  |
| Start of Year 5 |  |  |  |
| Start of Year 6 |  |  |  |
| Start of Year 7 |  |  |  |
| Start of Year 8 |  |  |  |
| Start of Year 9 |  |  |  |
| Start of Year 10 |  |  |  |
| Start of Year 11 |  |  |  |
| Start of Year 12 |  |  |  |
| Start of Year 13 |  |  |  |
| Start of Year 14 |  |  |  |

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