

Compound Percentage Increase

Give your answers to a sensible degree of accuracy.

- Zaynab invests £400 in a bank account at 3% compound interest.
How much money is in the account after:
a. 2 years b. 5 years c. 20 years?
- The population of a city is 230 000. The population is expected to grow by 7% every year.
What is the expected population in:
a. 3 years b. 8 years c. 10 years?
- There are 750 bacteria in a petri dish. The amount of bacteria is increasing by 27% every hour.
If the growth continues at this rate, how many bacteria will there be after:
a. 7 hours b. 1 day c. 2 days?
- The value of an antique painting is rising by 0.6% per month. It is currently worth £35 000.
If the value continues to rise at this rate, how much will the painting be worth after:
a. 6 months b. 1 year c. 3 years
- The membership of a website is increasing by 120% every year. In January 2009 there were 420 members.
If the growth continued at the same rate, how many members will there be in:
a. January 2011 b. January 2018 c. January 2027?
- Billy invests £1200 in a savings account with 4.5% compound interest per year.
How long will it take for Billy's savings to reach:
a. £1400 b. £1800 c. £2000?