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| --- | --- | --- |
| **Repeated Percentage Change** | | |
| **(a)** | **(b)** | **(c)** |
| Aliza’s salary will rise by 3% every year for the next 5 years. Her starting salary is £24500. What will she earn in 5 years’ time? | Hassan invests £4000 at a compound interest rate of 2.4% per year. How much money will he have after 3 years? | A colony of rabbits in growing at a rate of 35% per year. Initially the colony has 20 rabbits. How many rabbits will it have after 10 years? |
| **(d)** | **(e)** | **(f)** |
| Lucas invested £6500 10 years ago at an compound interest rate of 2.5% per year. He needs £8500 to buy a new Ford Fiesta. Will he have enough money in his account? | Bank A has an interest rate of 1.2% and Bank B has an interest rate of 1.3%. If I invest £5000 in both banks, what is the difference between the two balances after 4 years? | When people have an overdraft at a bank they are charged interest. Sonny is £45 overdrawn. His bank charges 2% per month interest rate. How much will Sonny owe after 6 months, assuming he doesn’t pay off any of his debt? |
| **(g)** | **(h)** | **(i)** |
| A credit card company charges interest at 3.2% **per month** on any outstanding balance. A balance of £1500 is left unpaid. What is the balance after 1 year? | The world population at the end of 2013 was 7.1 billion people. The current population growth rate is 1.1%. Assuming this rate stays the same, what will the population be in 2050? | There are 10 bacteria in a petri dish at the start of the day. The number doubles every hour. How many bacteria will there be after 24 hours? |