

Repeated Percentage Change

(a)	(b)	(c)
<p>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?</p> <p style="text-align: center; color: red;">£28402.21</p>	<p>Hassan invests £4000 at a compound interest rate of 2.4% per year. How much money will he have after 3 years?</p> <p style="text-align: center; color: red;">£4294.97</p>	<p>A colony of rabbits is growing at a rate of 35% per year. Initially the colony has 20 rabbits. How many rabbits will it have after 10 years?</p> <p style="text-align: center; color: red;">402</p>
(d)	(e)	(f)
<p>Lucas invested £6500 10 years ago at a 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?</p> <p style="text-align: center; color: red;">Lucas has £8320.55, so no</p>	<p>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?</p> <p style="text-align: center; color: red;">£20.76</p>	<p>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?</p> <p style="text-align: center; color: red;">£50.68</p>
(g)	(h)	(i)
<p>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?</p> <p style="text-align: center; color: red;">£2189.01</p>	<p>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?</p> <p style="text-align: center; color: red;">10.6 billion</p>	<p>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?</p> <p style="text-align: center; color: red;">167 772 160</p>