

Compound and Simple growth/Decay

1. A school buys tablets at a total cost of R140 000. If the average rate of inflation is 6,1% per annum over the next 4 years, determine the cost of replacing these tablets in 4 years' time.
2. An investment earns interest at a rate of 7% per annum, compounded semi-annually. Calculate the effective annual interest rate on this investment.
3. A car costing R198 000 has a book value of R102 755,34 after 3 years. If the value of the car depreciates at $r\%$ p.a. on a reducing balance, calculate r .
4. A new cell phone was purchased for R 7 200. Determine the depreciation value after 3 years if the cell phone depreciates at 25% per annum on reducing balance method.
5. A second-hand farm tractor worth R 60 000 has a limited useful life of 5 years and depreciates at 20% p.a. on a reducing-balance basis. Determine the value of the tractor at the end of each year over the 5-year period.