

1. Simple interest and linear decrease :

Formulas: **Simple Interest:** .....  
Eg: John invests 10 000 for 5 years at a SI rate of 9,5% p.a.  
How much does he have in his account at the end of 5 yrs ?

**Straight line decrease:** .....  
Eg: John's computer that cost R10 000 decreases on a straight line basis at a rate of 6,5% p.a. How much is it worth after 5 yrs?

2. Compound increase and reducing balance decrease :

Formulas: **Compound Increase:** .....  
Eg: John invests R10 000 at a compound interest rate of 9,5% p.a.  
How much does he have in his account at the end of 5 yrs ?

**Reducing Balance decrease:** .....  
Eg: John's computer that costs R10 000. It decreases on a reducing balance at a rate of 6,5% p.a. How much is it worth after 5 yrs?

**NB: Hire Purchase is :** ..... Interest  
Eg: Mr X buys machinery for R14 000. He pays a 10% deposit and then pays the rest off over 4 years on a Hire purchase agreement at a rate of 16% p.a.  
What are his monthly instalments ?

**Inflation is** ..... Interest  
Eg: Mr X wants to buy machinery for R14 000. He decides to wait 3 years until he can afford to pay cash for the items. The inflation rate is 6,5% p.a. How much will the machinery cost in 3 years time ?

**NB: Be able to find A, P, i or n.**

How much do you need to invest at 9% p.a. simple interest in order to have R10 000 after 4 years ?

How much do you need to invest at 9% p.a. compound interest in order to have R10 000 after 4 years ?

At what simple interest rate do you need to invest an amount For 3 years in order for the amount to double ?

At what compound interest rate do you need to invest an amount For 3 years in order for the amount to double ?