

Percent Applications - Simple Interest

- I earn 6% p.a. simple interest on money in my bank account. How much interest do I earn after one year if my account has
 - \$4000
 - \$800
 - \$15 000
- I earn 7.5% p.a. simple interest on money in my bank account. How much interest do I earn after one year if my account has
 - \$8000
 - \$1650
 - \$75 000
- I earn 8% p.a. simple interest on money in my bank account. How much interest do I earn after three years if my account has
 - \$2000
 - \$15 000
 - \$475
- I earn 4.5% p.a. simple interest on money in my bank account. How much interest do I earn after three years if my account has
 - \$6000
 - \$12 000
 - \$360
- I earn 6% p.a. simple interest on money in my bank account. My account has \$9000. How much does my bank account grow to after
 - 5 years
 - 3½ years
 - 9 months
- I earn 9.25% p.a. simple interest on money in my bank account. My account has \$4000. How much interest do I earn after
 - 3 years
 - 6½ years
 - 18 months
- I have \$5000 in my bank account. My money is earning simple interest. What is the simple interest rate per annum if at the end of one year if I earn:
 - \$250 interest after 1 year
 - \$400 interest after 2 years
 - \$300 interest after 4 years
 - \$900 interest after 5 years
- I have \$11000 in my bank account. My money is earning simple interest. What is the simple interest rate per annum if at the end of one year if I earn:
 - \$1100 interest after 1 year
 - \$1500 interest after 2 years
 - \$660 interest after 4 years
- The money in my bank account is earning simple interest. How much money is in my account if
 - the interest rate is 5% p.a. and I earn \$100 interest in the first year.
 - the interest rate is 3% p.a. and I earn \$150 interest in the first year.
 - the interest rate is 4% p.a. and I earn \$150 interest in the first 3 years.
- The money in my bank account is earning simple interest. How much money is in my account if
 - the interest rate is 8% p.a. and I earn \$200 interest in the first year.
 - the interest rate is 6.5% p.a. and I earn \$1300 interest in the first 2 years.
 - the interest rate is 4.2% p.a. and I earn \$800 interest in the first 3 years.

Percent Applications – Compound Interest

- Find the amount to which an investment grows if:
 - \$4000 is invested at 5% p.a. compounded annually for 4 years.
 - \$3000 is invested at 6% p.a. compounded annually for 2 years.
 - \$20 000 is invested at 8% p.a. compounded annually for 6 years.
 - \$15 000 is invested at 6.5% p.a. compounded annually for 12 years.
- Find the amount to which an investment grows if:
 - \$10 000 is invested at 6% p.a. compounded monthly for 3 years.
 - \$500 is invested at 3% p.a. compounded monthly for 20 years.
 - \$8500 is invested at 8% p.a. compounded quarterly for 7 years.
 - \$8500 is invested at 6% p.a. compounded quarterly for 5 years.
- What is an investment of \$5000 worth after 25 years if it is invested at:
 - 9% p.a. compounded annually.
 - 9% p.a. compounded quarterly.
 - 9% p.a. compounded monthly.

Challenge Questions!

- How much must I invest today
 - at 7% p.a. compounded annually if I want to have \$10 000 in 3 years?
 - at 6% p.a. compounded monthly if I want to have \$6000 in 2 years?
 - at 3% p.a. compounded monthly if I want to have \$8500 in 2½ years?
 - at 7.2% p.a. compounded daily if I want to have \$4000 in 2 years?
- I invest \$20 000 for 30 years. I earn 8% p.a. simple interest on my investment. Julie invests \$20 000 for 30 years. She earns 8% p.a. compounded annually on her investment. How much more interest does Julie earn than me?
- If money is compounded more frequently, it obviously earns money at a faster rate. Assume \$100 000 is invested at 12% p.a. Calculate the interest earned after one year if the interest is compounded:
 - annually
 - monthly
 - daily
 - every second

Look! – Answers to Simple Interest

- a. \$240 b. \$480 c. \$900 2. a. \$600 b. \$123.75 c. \$5625 3. a. \$480 b. \$3600 c. \$114
- a. \$810 b. \$1620 c. \$48.60 5. a. \$2700 b. \$1890 c. \$405
- a. \$1110 b. \$2405 c. \$555 7. a. 5% b. 4% c. 1.5% d. 3.6% 8. a. 10% b. 6.8% c. 1.5%
- a. \$2000 b. \$5000 c. \$1250 10. a. \$2500 b. \$10 000 c. \$6350

Look! – Answers to Compound Interest

- a. 4862.03 b. 3370.80 c. 31737.49 d. 31936.44
- a. 10150.75 b. 508.82 c. 12630.55 d. 9156.91
- a. 5450.00 b. 5465.42 c. 5469.03
- a. \$8163 b. \$5323 c. \$7887 d. \$3464
- \$112969.50
- a. \$112 000 b. \$112 682.50 c. \$112 747.46 d. \$112 749.77