

Simple & Compound Interest Problems

- Lisa invested \$8000 at 9.25% for 30 months. Calculate the interest earned and the (final) amount.
Find = _____ Answer = _____
Find = _____ Answer = _____
- Dylan has an investment that earns him \$300 each year. If the annual rate is 8%, what is the principal?
Find = _____ Answer = _____
- David invested in a 15-week term deposit that earned $7\frac{3}{4}\%$ of simple interest. When it matured he received \$1250 in interest annually. He then reinvested all his money in a 40-week term deposit so that it would earn 8.5% annually.
 - How much was the original investment?
Find = _____ Answer = _____
 - How much will David have when the second term deposit matures?
Find = _____ Answer = _____
- Alexie invested \$5000 at 6% compounded annually for 17 years. Meja invested \$5000 at 6% compounded daily for 17 years.
 - Which investment earned more money?
Find = _____ Answer Alexie = _____ Answer Meja = _____
 - How much more?
- Jessica wants to have \$15000 in 7 years. Her bank will pay her 5%/a interest compounded quarterly. How much does she have to invest now to have the money in the future?
Find = _____ Answer = _____
- Phil wants to buy a car worth \$20 000 5 years from now.
 - How much should he invest in a GIC account earning 6%/a compounded semi-annually?
Find = _____ Answer = _____
 - How much interest did he earn?
Find = _____ Answer = _____
- Megan will receive \$5000 on her 21st birthday from her parents who invested when she was born. If the interest rate was $4\frac{3}{4}\%$ compounded monthly, how much did her parents invest when she was born?
Find = _____ Answer = _____

8. When Sean was born, his grandparents deposited \$5000 in an account that pays interest compounded quarterly. No further deposits or withdrawals were made. On Sean's 25th birthday, the amount in the account was \$22 160.23. What annual rate of interest did the account pay? Round to the nearest percent.
Find = _____ Answer = _____
9. Chad invests \$1500 into a savings account that pays 6% compounded semi-annually. How long will it take Chad to triple his money? Round to the nearest year.
Find = _____ Answer = _____ years
10. Shaun needs to pay for his university loan of \$5000. The interest rate of the loan is 2.5%/a compounded monthly and must be paid as a lump sum at the end of the 2 year term. How much will Shaun have to pay back?
Find = _____ Answer = _____
11. How much did Heather invest at 4%/a compounded semiannually for 3 years if the final amount was \$7500
Find = _____ Answer = _____
12. What annual interest rate was Mike charged if an \$800 credit card bill grew to \$920.99 in 6 months and the interest was compounded monthly. Round to the nearest hundredth.
Find = _____ Answer = _____
13. Approximately how long would it take for a \$15000 investment to double if it earns 10%/a interest compounded semiannually? Round to the nearest tenth
Find = _____ Answer = _____ years