

Unit 5 – Simple Interest Additional Practice Questions

1. What annual rate of interest was earned if a \$10000 investment for 7 months earned \$213.45 in interest?
2. How much interest will be earned on \$15000 in 3 months if the interest rate is 3.75%?
3. Joy loaned \$4100 to Allister at a simple interest rate of 0.65% per month. What was the term of the loan if the total interest came to \$271.45?
4. The interest owed on a loan after 8 months was \$196.45. If the simple interest rate charged on the loan was 0.9% per month, what was the amount borrowed?
5. Megan put \$10,000 in a CIBC 3 year escalating rate GIC. The GIC pays at a simple interest rate 1% in the first year. She reinvests the \$10,000 plus interest for another year where she earns 1.1% p.a. For the third year she reinvests her \$10,000 plus accumulated interest for another year at 1.65% p.a. How much interest did she earn over the 3 years?
6. On June 9 Dominic put \$3200 into a GIC until August 31, when he needs the money for tuition, books and other expenses to return to university. His bank pays an interest rate of 0.75% p.a. How much interest will he earn on the GIC?
7. Bill's chequing account was \$430 overdrawn beginning on September 24. On October 14 he made a deposit that restored a credit balance. If he was charged overdraft interest of \$2.75, what annual rate of simple interest was charged?
8. How much will be required on February 1, 2021 to pay off a \$3000 loan advanced on the previous September 30 if the variable interest rate began the interval at 4.7%, rose to 5.2% effective November 2, and then dropped back to 5% effective January 1?
9. Mark received the proceeds from an inheritance from his Aunt May on March 25, 2020. He wants to set aside enough on March 26 so that he will have \$20,000 available on October 1 to purchase a car when the new models are introduced. If the current interest of deposits is 1.1%, what amount should he place in the term deposit?
10. Erin can purchase the same furniture from Store A for \$2495 cash or from Store B for \$2560 with nothing down and no payments or interest for 8 months. Which option should Erin choose if she can pay for the furniture by cashing her Vanguard Short Term Corporate Bond ETF (VCSH) currently earning 2.13% per annum?
11. Payments of \$1300 due five months ago and \$1800 due three months from now are to be replaced by a single payment at a focal date one month from now. What is the size of the replacement payment that would be equivalent to the two scheduled payments if money can earn 4.5%?
12. A payment stream consists of three payments: \$1000 due today, \$1500 due in 70 days from today, and \$2000 due 210 days from today. What single payment, 60 days from today, is equivalent to the payment stream if money can be invested at a rate of 3.5%?

13. Payments of \$2600 due 50 days ago, and \$3100, due in 40 days, are to be replaced by payments of \$3000 due today and the balance due in 30 days. What must the second payment be if the payee is to end up in an equivalent financial position? Money now earns 8.25%. The answer key will use 30 days from now as the focal date. You may choose any focal date and you should get the same answer.
14. The Yergins are considering two offers to purchase their summer cottage. Offer A is for \$200,000 consisting of an immediate \$40,000 down payment with the \$160,000 balance payable one year later. Offer B is for \$196,500 made up of a \$30,000 down payment and the balance \$166,500 balance payable in six months. If money can earn 6%, which offer should the Yergins accept?