



Year 10 Mathematics

Financial Maths Practice Test 1

Name _____

- 1 Find the simple interest charged on \$860 at 16% pa for 5 years?
- 2 What is the simple interest on \$2400 at 8% pa for 5 months?
- 3 Find the simple interest on \$900 for 240 days at a rate of 11% p.a
- 4 What is the simple interest on \$1950 for 7 months at 1.2% per months?
- 5 Betty invests \$2000 for 3 years at 3% p.a. simple interest. What is the value of her investment at the end of that 3 years?
- 6 After 3 years an investment of \$1000 has earned \$120 in interest what is the annual interest rate (correct to one decimal place)
- 7 For how long will \$20 000 need to be invested to earn \$150 in interest, if the interest rate is 3.5% p.a?
- 8 Jim paid back \$12 080 on a \$9000 loan over 3 years. Find the simple interest rate p.a (correct to 1 d.p)
- 9 An amount of \$10 000 is invested at 4% p.a compounded annually. What is the compound interest earned?

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Compound Interest Table
Total Amount (A) of \$1 investment

| n | 1.5% | 4.0% | 4.5% | 5.0% | 5.5% | 6.0% | 7.0% |
|----|----------|----------|----------|----------|----------|----------|----------|
| 1 | 1.015000 | 1.040000 | 1.045000 | 1.050000 | 1.055000 | 1.060000 | 1.070000 |
| 2 | 1.030225 | 1.081600 | 1.092025 | 1.102500 | 1.113025 | 1.123600 | 1.144900 |
| 3 | 1.045678 | 1.124864 | 1.141166 | 1.157625 | 1.174241 | 1.191016 | 1.225043 |
| 4 | 1.061364 | 1.169859 | 1.192519 | 1.215506 | 1.238825 | 1.262477 | 1.310796 |
| 5 | 1.077284 | 1.216653 | 1.246182 | 1.276282 | 1.306960 | 1.338226 | 1.402552 |
| 6 | 1.093443 | 1.265319 | 1.302260 | 1.340096 | 1.378843 | 1.418519 | 1.500730 |
| 7 | 1.109845 | 1.315932 | 1.360862 | 1.407100 | 1.454679 | 1.503630 | 1.605781 |
| 8 | 1.126493 | 1.368569 | 1.422101 | 1.477455 | 1.534687 | 1.593848 | 1.718186 |
| 9 | 1.143390 | 1.423312 | 1.486095 | 1.551328 | 1.619094 | 1.689479 | 1.838459 |
| 10 | 1.160541 | 1.480244 | 1.552969 | 1.628895 | 1.708144 | 1.790848 | 1.967151 |
| 11 | 1.177949 | 1.539454 | 1.622853 | 1.710339 | 1.802092 | 1.898299 | 2.104852 |
| 12 | 1.195618 | 1.601032 | 1.695881 | 1.795856 | 1.901207 | 2.012196 | 2.252192 |

Use the table above

- a) to calculate the total amount if \$1800 is invested at 5.5% p.a compounded annually for 7 years
- b) to find the compound interest earned when \$3500 is invested at 8% p.a compounded twice a year for 6 years.
- c) to calculate the compound interest earned if \$6150 is invested at 6% p.a compounded quarterly for 2 years

- 11 A principal of \$1500 is invested at 2% p.a compounded annually over 3 years. What is:
 - a) the value of the investment after 3 years
 - b) the compound interest earned?
- 12 An amount of \$2700 is invested at 5% p.a with the interest compounded quarterly. Calculate the total amount of the investment after 3 years and the interest earned over 3 years
- 13 A teachers professional library depreciates at a rate of 15% p.a. If Mr Dobmaths library is currently valued at \$6000, what will be its value in 5 years? What is the depreciation over this time?
- 14 A Plasma TV originally valued at \$890, depreciates at 10% p.a What percentage of the original value remains after 6 years?
- 15 A computer system which cost \$3400 depreciates at a rate of 12% p.a
 - a) Find the depreciated value of the system after 6 years (to the nearest dollar)
 - b) Express the depreciated value as a percentage of the cost price (to 1 d.p)
- 16 Jack and Jill went to GG Hi Fi to purchase a TV costing \$3800. They were given a 10% discount for paying with cash. How much did they pay for the TV?
- 17 A surround sound system costing \$740 is purchased on lay-by. A 5% deposit is paid, with the balance paid off over 4 months. Calculate the size of each monthly payment.