MEL 3E Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# Simple Interest

1. Complete this table. MAKE SURE TO TURN THE TIME TO A DECIMAL BY DIVIDING THE NUMBER OF MONTHS BY TWELVE

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Principal P | Interest Rate R | Time T | Interest Earned I = P x R x T | Amount at end A = P + I |
| $1000 | 7% per year  = 0.07 | 9 months  9 **/**12 = 0.75 years | I = 1000 x 0.07 x 0.75  = $52.50 | A = $1000 + $52.50  = $1052.50 |
| $7400 | 3.255% per year  = 0.03255 | 72 months |  |  |
| $1500 | 0.255% per year | 12 months |  |  |
| $1500 | 0.255% per year | 6 months |  |  |
| $10 000 | 8% per year | 3 years |  |  |
| $10 000 | 10.25% per year | 5 years |  |  |
| $10 000 | 12.25% per year | 10 years |  |  |

### 2. Read these two stories, and find out how much interest is earned..

### STORY ONE

You have $5000 to invest in a term deposit. The interest is paid annually (yearly) at the rate of 2.4% per year, and you will invest it for 2 years. Calculate the total interest that you are paid and the value of your investment after 2 years (24 months).

### STORY TWO

You have received a $1000 bonus at work. You have decided to choose a simple interest G.I.C. that pays 3.255% per year. Calculate the total interest that you are paid and the value of your investment after 5 years.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Principal P | Interest Rate R | Time T | Interest Earned I = P x R x T | Amount at end A = P + I |
| STORY ONE  $5000 |  |  |  |  |
| STORY TWO  $1000 |  |  |  |  |

3. You have inherited $5000! You are not sure which Term Deposit is a better choice to keep your money.

|  |  |
| --- | --- |
| **OPTION 1:** 4.75% per year, money is locked away for 1 year. You can’t take the money out during that time, even if you need it. | **OPTION 2:** 4.15% per year, money is locked away for 1 year. You can take the money out after the first 6 months, but you lose all the interest. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Principal P | Interest Rate R | Time T | Interest Earned I = P x R x T | Amount at end A = P + I |
| OPTION ONE  $5000 |  |  |  |  |
| OPTION TWO  $5000 |  |  |  |  |

Which OPTION earns more interest? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What are the advantages of OPTION TWO compared with OPTION ONE?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_