**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_**

**Car Project: Calculating Repayments**

This is the third of five assessment tasks in the topic of motoring maths. This piece will count towards your overall assessment for VCE Foundation Mathematics.

1. Your auntie tells you that if, instead of buying a car straight away, you put your money in the bank and earn 3.5% interest for a year, she’ll give you $500 next Christmas to go towards the car.
2. Calculate how much you’d have at the end of next Christmas if you take your auntie up on her offer.
3. Compare the loan now to your selected scenario from question 2. How have the weekly repayments change now that you’ve increased the size of your loan?

**Marking Scheme**:

This piece is assessing Outcome 2: apply mathematical procedures to solve practical problems in both familiar and new contexts, and communicate their results.

|  |  |
| --- | --- |
| A level | Assumes interest was compound interest compounding monthly. Calculates compound interest by hand using the compound interest formula. Also explores two additional scenarios as expressed in B level.  |
| B level | C level and also explores at least two other hypothetical scenarios in which student contributes additional funds themself as they've also been able to save during the year (student to create these hypothetical scenarios) |
| C level | D level except assumes that interest was compound interest compounding monthly. Uses ASIC compound interest calculator to calculate interest gained on the $1000 |
| D level | E level plus talks about change in weekly repayments as a percentage change from the original. |
| E level | Assumes that the interest is simple interest. States how much would have at next Christmas and states how weekly repayments have changed |

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