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| **MATHEMATICS DEPARTMENT** | |  |
| **Course:** **ATMAA** | |
| **Topic Title**: **Skills Test 8** | |
| Student Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Date: \_\_\_\_\_\_\_\_\_\_2016 | | |
| Special Instructions: Calculators Allowed | Time Allowed: 20 mins | | |
|  | Marks: / 16 | | |

**Question 1 (1 mark)**

Amadi borrows $198 000 at 6% p.a. interest, calculated monthly. If the loan is to be paid off over 17 years, what will the monthly repayments be?

**Question 2 (2 marks)**

Harry borrows $164 000 at 7% p.a. interest, calculated monthly. If the loan is to be paid off over 24 years, find the total amount paid?

**Question 3 (3 marks)**

Peter borrows $264 000 at 7.5% p.a. interest, calculated monthly. If the loan is to be paid off over 22 years, find the total interest paid.

**Question 4 (1 mark)**

Benji borrows $88 000 at 8% p.a. interest, calculated monthly, to be paid off over 22 years with repayments of $709.44 each month. How much will he still owe after 6 years?

**Question 5 (2 marks)**

Jack borrows $216 000 at 4.5% p.a. interest, calculated monthly, to be paid off over 18 years with repayments of $1460.86 each month. How much will he have paid off after 5 years?

**Question 6 (2 marks)**

Marika borrows $122 000 at 6% p.a. interest, calculated monthly. If she makes fortnightly repayments of $405:

a) how many repayments will she need to make?

b) how long in years and months?

**Question 7 (5 marks)**

Suzi wants to buy a new motorbike which costs $18 000. She has two options to finance the purchase.

Option A

The dealer offers terms of zero deposit, a rate of 9.7% p.a. compounded fortnightly over 6 years with fortnightly payments.

Option B

The bank offers term of no deposit, a rate of 9.5% p.a. compounded fortnightly over 6 years with monthly payments.

Which would be the better option for Suzi and how much would she save over the life of the loan.