

|  |  |  |
| --- | --- | --- |
| Mathematics Department | |  |
| Course: A1MAA | |
| **Topic Title:** Test 2 - Algebra, Earning Money & Simple/Compound Interest | |
| Student Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Date: \_\_\_\_\_\_\_\_\_\_\_\_ | | |
| Special Instructions: **Calculator Free** | Time Allowed: 20 minutes | | |
| Formulae Sheet | Marks: / 17 | | |
| Show all working | | | |

**Question 1 [2, 2: 4 marks]**

If , , and , then find the values of:

a) b)

**Question 2 [2 marks]**

Using the formula v = u + at, calculate v given: u =11, a =0.5 and t = 25

**Question 3 [3 marks]**

Give worded definitions for the following financial terms:

i) Per annum:

ii) Principal:

iii) Discretionary Spending:

**Question 4 [2, 1, 2: 5 marks]**

1. Tyler’s usual rate of pay is $24 per hour.

What will he be paid per hour when he is paid *time-and-a-half?*

1. Beth works 40 hours in a normal week and is paid $35.00 per hour.

How much will she in earn in one week?

1. Fran sold 5000 tickets to a concert and earned $15 000 in commission. What was the commission on each ticket?

**Question 5 [1 mark]**

Sally showed the following calculations for an $8000 investment earning simple interest @ 2.2 % p.a. for 4

years. Determine the error(s) in Sally’s mathematics calculations, making necessary corrections.

**Question 6 [2: 2 marks]**

For a twelve-month work contract, would you earn more if you were paid $5000 each month or $2500 per

fortnight? Explain your choice of answer.