**SACRED HEART GIRLS’ COLLEGE**

**OAKLEIGH**



**Mathematical Methods CAS 2014**

**Unit 3 SAC 1: TEST**

**Part A**

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

**Teacher (please circle)**: Ms Gates Mr Smith Ms Garkel

**No CAS and no summary notes permitted**

**Part A: 5 short answer questions**

**Writing Time: 20 minutes**

**Marks: 14**

**SHORT ANSWER QUESTIONS**

**Instructions:**

Answer **all** questions in the spaces provided.

In all questions where a numerical answer is required an exact value must be given unless otherwise specified.

In questions where more than one mark is available, appropriate working **must** be shown.

Unless otherwise indicated, the diagrams in this test are **not** drawn to scale.

**Question 1** (2 marks)

Solve the equation

**Question 2** (2 marks)

Solve the equation

**Question 3** (2 marks)

Solve the equation for

**Question 4** (3 marks)

Let

1. Find the rule and domain of the inverse function 2 marks
2. If , find the value of 1 mark

**Question 5** (5 marks)

1. Find for the function 1 mark
2. Show that the intercept for is equal to 3 marks
3. State the values of for which 1 mark

**END OF QUESTION AND ANSWER BOOKLET**