The University of Newcastle
School of Electrical Engineering and Computer Science

COMP3260/COMP6360 Data Security

GAME 1 Thursday
7th March 2019

Number of Questions: 2
Time allowed: 50min
Total mark: 4

Calculators not allowed.

	Student Number	*Student Name*
Student 1		
Student 2		
Student 3		
Student 4		
Student 5		
Student 6		
Student 7		

Question 1	*Question 2*	*TOTAL*

1. Using fast exponentiation, calculate $7^{8175} \bmod 20$. Show all the workings.

2. Using Chinese Remainder Theorem, solve the following equation:

$$19x \bmod 26 = 1$$