NI	C414#.	D-4
Name:	Student#:	Date:

## **COMP 2711: Discrete Mathematical Tools for Computer Science**

## In Class Exercise #18

1. Use Mathematical Induction to prove that:

If 
$$S(n) = 2S(n-1)$$
 if  $n \ge 1$  and  $S(0) = 1$ 

Then, 
$$S(n) = 2^n$$
 for all  $n \ge 0$