

Due Date: July 11, 2011 Monday

NAME:.....

Ali Sinan Sertöz

STUDENT NO:.....

Math 302 Complex Analysis II – Homework 7

1	2	TOTAL
10	10	20

Please do not write anything inside the above boxes!

Check that there are 2 questions on your booklet. Write your name on top of every page. Show your work in reasonable detail. **A correct answer without proper or too much reasoning may not get any credit.**

NAME:

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Q-1) Find an infinite product expression for $\cos z$ and prove in detail all phases of your arguments.

Solution:

NAME:

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Q-2) Prove that

$$\pi = 2 \prod_{\substack{n=2 \\ n \text{ even}}}^{\infty} \frac{n^2}{(n-1)(n+1)}.$$

Solution: