Mathematics for Chemists 1st week Hilary Term 2005

http://timmel.chem.ox.ac.uk/lectures/

Complex Numbers

1. Give the following numbers in trigonometric form

$Z_1 = 4 - 3i$

$Z_2 = -2 - 6i$

$Z_3 = 3i$

And depict them in an Argand diagram.

2. Determine the real and imaginary parts of the following numbers

a) i^i

b) $|2^i|^2$

c) $\sin(6i)$

d) $\ln(7i+3)$

3. Solve questions 1-7 and 9-12 in the problem booklet.