

Assignment #3

DUE *Wednesday 13 February, 2008*

Exercises on pages 31–32 of BROWN & CHURCHILL: # 1abde, 4abcd, 5, 6, 9

Exercise C3. Write

$$f(z) = \frac{1}{z+1} + \sqrt{z}$$

in the form $f(z) = u(r, \theta) + iv(r, \theta)$, where, as usual, $z = re^{i\theta}$. That is, find $u(r, \theta)$ and $v(r, \theta)$.

Exercises on pages 42–43 of BROWN & CHURCHILL: # 1, 3, 4, 5, 8