Homework 6

# 6.1

### a)

Needs to be two sided because the step function conditions make it so that n must be greater than or equal to -3, and less than or equal to 1

The R.O.C. (even though it doesn’t really ‘converge’) should be

### b)

It can be one sided because the step function condition only specifies that n must be greater than or equal to -1

The R.O.C. should be z

### c)

It doesn’t matter if the z-transform is one sided or two sided since x[n] will be 0 for all negative values of n

The R.O.C.s should be

### d)

It doesn’t matter if the z-transform is one sided or two sided since x[n] will be 0 for all negative values of n

The R.O.C.s should be intersection of R.O.C. for each of the two sums, so it will be

# 6.2

### a)

### b)

### c)

### d)

### e)