Stat13 Homework 4

Suggested Solutions

Question One:

Part A –

1. .2266
2. .2266
3. .6179
4. .2857
5. 4772
6. .4332 + .2857   or   .9104

Part B –

1. 12.6584
2. (7.2096, 10.9904)

Part C –

1. .1056
2. .3712
3. 4.004

Part D –

1. mean(y) = 19.5   standard deviation(y) = 16.3932
2. the shape of Y is flatter and longer then that of either X or W

Question Two:

Part A –

1. –1.36666
2. 2.3
3. 1.3
4. -.833333
5. .3643 Including or excluding the endpoint has no effect, because the integral over the range (a,a) is equal to zero.

Question Three: (uses standard deviation = sqrt(2.6^2 + 2.9^2) for parts b and c)

1. .1860
2. .5319
3. .0869