CH.10

3) a- 63.9 b- 62.07 c- 63 d- 63

9) a- 21% b- 65% c- 50% d- 50%

10) False, this student will be between 40% and 50% on the final.

CH. 11

3) a- 1-.82 \* 2.5 = 1.5 b-1-.82 \* 1.7= 1.02

4) a-  $1-.62 \times 15 = 12$  (one RWS Error from the regression line)

b- 65.8

c- one RMS Error from the regression line, 12

5) a- (80-55)/15= 1.67 (SDs above the mean), which is associated on the Z table with approximately 90% of the distribution. Take half of the difference from that and 100% to get the right tail- 5% of students scored over 80 on the final.

b- (80-50)/25= 1.2 SDs above the mean on the midterm, which corresponds to a predicted final value of  $1.2^{*}.6^{*}15+55$ , or 65.8. With a RWS Error of 12, 80 would be 1.18 standard errors from the predicted final value. 1.18 is associated on the Z table with approximately 76% of the distribution. Take half of the difference from 100% to get the right tail- 12% of students who scored 80 on the midterm score over 80 on the final.