2. Determine the expected completion time and variance for each activity, the expected completion time and variance for the overall project completion time, and answer questions a, b, and c below.

**Immediate Most**

**Activity Predecessor Optimistic Probable Pessimistic E(t) Variance**

A ---- 2 8 26

B A 4 10 22

C A 4 7 10

D B 3 3 3

E C 3 6 9

a). What is the probability that the project will require more than 32 weeks to complete?

b). What is the probability that the project will be completed between 19 and 28 weeks?

c). What is the probability that the project will be completed between 15 and 20 weeks?