Sum .1

A monthly income investment scheme exists that promises variable monthly returns. An

investor will invest in it only if they are assured of an average $180 monthly income. The

investor has a sample of 300 months’ returns which has a mean of $190 and a standard

deviation of $75. Should they invest in this scheme.

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H0 = 180

Ha !=180

Formulate hypothesis in terms

LCM = 180 + (-1.96) \* 4.33

LMC = 16.04 \* 4.33

LCM = 69.4532

UCM = 180 + 1.96 \* 4.33

UCM = 19.96 \* 4.33

UCM = 86.4268

Sum. 2

A new stockbroker (XYZ) claims that their brokerage fees are lower than that of your current

stock broker's (ABC). Data available from an independent research firm indicates that the

mean and std-dev of all ABC broker clients are $18 and $6, respectively.

A sample of 100 clients of ABC is taken and brokerage charges are calculated with the new

rates of XYZ broker. If the mean of the sample is $18.75 and std-dev is the same ($6), can any

inference be made about the difference in the average brokerage bill between ABC and XYZ

broker?

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H0 < 18

Ha >1

1.25

Formulate hypothesis in terms

LCM = 18 + (-1.96) \* 0.6

LMC = 16.04 \* 0.6

LCM = 9.624

UCM = 18 + 1.96 \* 0.6

UCM = 19.96 \* 0.6

UCM = 11.976