Online Homework Package Created by : Elsit and Satya Mandal		
Course Id :Math 105	Course Id :Math 105 Topics in Mathematics	
Instructor :Satya Mandal Line No : 84895		
Homework No: 22	Total Points :45	Due Date:(YYYY-MM-DD) 2017-07-27

Question	- The time taken for an athlete to run an event has a distribution with mean µ seconds and known
1	standard deviation $\sigma = 3.5$ seconds. To estimate the mean run time μ , the athlete runs the event 30
	times and the sample mean run time \underline{x} was found to be 25 seconds.
	In this question and the next two, we will compute a 95 percent confidence interval for the mean
	time μ.
	Find the margin of error for the athlete at a confidence level of 95 percent.

Answer Question-1	This is a Numerical-Answer Type Question
	MOE =
Points	5.00

Ouestion-2	Refer to Ouestion 1, find the left end point of the confidence interval.
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Answer Question-2	This is a Numerical-Answer Type Question
	LEP =
Points	5.00

Question-3 Refer to Question 1, find the right end point of the confidence interval.

Answer Question-3	This is a Numerical-Answer Type Question
	REP =
Points	5.00

Question-
4It is known that the tuition paid per semester by students in a university has a distribution with
mean μ and known standard deviation $\sigma = \$1278$. To estimate the mean μ a sample of 180 students
were interviewed. The sample mean \underline{x} is found to be \$4200.
In this question and the next two, we will compute a 92 percent confidence interval for the mean
tuition μ .
Find the margin of error for a 92 percent confidence interval.

Answer Question-4	This is a Numerical-Answer Type Question
	MOE =
Points	5.00

Question-5 Refer to Question 4, find the left end point of the confidence interval.

Answer Question-5	This is a Numerical-Answer Type Question
	LEP =
Points	5.00

Question-6 Refer to Question 4, find the right end point of the confidence interval.

Answer Question-6	This is a Numerical-Answer Type Question
	REP =
Points	5.00

	Question-	ion- The weight of salmon caught in a river has mean μ pounds. We know from previous experience that	
1	7	the standard deviation of the weight is $\sigma = 6$ pounds. Suppose you catch 56 fish and the mean	
		weight of the fish is $\underline{x} = 21.1$ pounds.	
		In this question and the next two, we will compute a 90 percent confidence interval for the mean	
		weight μ .	
		Find the margin of error in estimating μ at a 90 percent confidence interval.	

Answer Question-7	This is a Numerical-Answer Type Question
	MOE =
Points	5.00

Question-8 Refer to Question 7, find the left end point of the confidence interval.

Answer Question-8	This is a Numerical-Answer Type Question
Points	5.00

Question-9 Refer to Question 7, find the right end point of the confidence interval.

Answer Question-9	This is a Numerical-Answer Type Question
Points	5.00

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