

Question 2 of 20

1.0 Points

Accepted characters: numbers, decimal point markers (period or comma), sign indicators (-), spaces (e.g., as thousands separator, 5 000), "E" or "e" (used in scientific notation). **NOTE:** For scientific notation, a period MUST be used as the decimal point marker. Complex numbers should be in the form (a + bi) where "a" and "b" need to have explicitly stated values.

For example: {1+1i} is valid whereas {1+i} is not. {0+9i} is valid whereas {9i} is not.

A survey of 85 families showed that 36 owned at least one DVD player. Find the 99% confidence interval estimate of the true proportion of families who own at least one DVD player. Place your limits, **rounded to 3 decimal places**, in the blanks. Place the lower limit in the first blank and the upper limit in the second blank When entering your answer do not use any labels or symbols other than the decimal point. Simply provide the numerical values. For example, 0.123 would be a legitimate entry.

Question 4 of 20

1.0 Points

Accepted characters: numbers, decimal point markers (period or comma), sign indicators (-), spaces (e.g., as thousands separator, 5 000), "E" or "e" (used in scientific notation). **NOTE:** For scientific notation, a period MUST be used as the decimal point marker. Complex numbers should be in the form (a + bi) where "a" and "b" need to have explicitly stated values.

For example: {1+1i} is valid whereas {1+i} is not. {0+9i} is valid whereas {9i} is not.

The percent defective for parts produced by a manufacturing process is targeted at 4%. The process is monitored daily by taking samples of sizes $n = 160$ units. Suppose that today's sample contains 14 defectives.

How many units would have to be sampled to be 95% confident that you can estimate the fraction of defective parts within 2% (using the information from today's sample--that is using the result that $\hat{p} = 0.0875$)?

Place your answer, as a whole number, in the blank. For example 567 would be a legitimate entry.

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1.0 Points

The upper limit of the 90% confidence interval for the population proportion p , given that $n = 100$; and $\hat{p} = 0.20$ is

- ☐ A. 0.2658
- ☐ B. 0.4684
- ☐ C. 0.5316
- ☐ D. 0.7342

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1.0 Points

A researcher wishes to know, with 98% confidence, the percentage of women who wear shoes that are too small for their feet. A previous study conducted by the Academy of Orthopedic Surgeons found that 80% of women wear shoes that are too small for their feet. If the researcher wants her estimate to be within 3% of the true proportion, how large a sample is necessary?

- ☐ A. 966
- ☐ B. 683
- ☐ C. 183
- ☐ D. 484

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1.0 Points

The upper limit of the 90% confidence interval for the population proportion p , given that $n = 100$; and $\hat{p} = 0.20$ is 0.2341.

- ☐ True
- ☐ False