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# Answer sheet 1

Course: statistics

Topic: Confidence Intervals

2024-2025

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Use this pattern whenever you want to define a confidence interval.

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**Statistical context:**

1. the population:
2. the sample:
3. the observed variable:
4. the parameter to estimate:

**Mathematical setting. What are (in the context of the problem)**

1. the assumptions on the parent variable and the parameter:
2. the estimator of the parameter:
3. the decision variable involved in the confidence interval and its distribution (precise if it is exact or approximate):
4. The expression of the confidence interval in terms of the point estimate, the size of the sample and the appropriate quantile of the above statistic:

**Give the numerical results:**

1. confidence level:
2. point estimate of the parameter:
3. margin of error (except for the case of the variance):
4. confidence interval (write a sentence):