

2024 AP Stats Exam Predictions 2024

#1 Exploring Data	#2 Collecting Data	#3 Probability
<p>Two-variable data</p> <ul style="list-style-type: none"> describe relationship ^{-DUFS} _{+context} interpret slope prediction or residual add/remove outlier or influential point 	<p>Sampling / Experiment</p> <ul style="list-style-type: none"> SRS, stratified, cluster, systematic samples experimental units, treatments, response variable random sample \rightarrow to generalize to population vs random assignment \rightarrow to show causation 	<ul style="list-style-type: none"> normal distribution calculation binomial calculation \rightarrow define random variable tree diagram conditional probability $P(A B) = \frac{P(\text{both})}{P(\text{given})} = \frac{P(A \text{ and } B)}{P(B)}$
#4 Inference	#5 Multi-focus	#6 Investigative Task
<p>two-sample z-test for $p_1 - p_2$</p> <p>* use \hat{p}_c to check Large Counts $\&$ in formula for SE.</p>	<p>One-variable data (two groups)</p> <ul style="list-style-type: none"> Describe/compare distributions _{SOC V + context} Confidence interval for μ or $\mu_1 - \mu_2$ Use confidence interval to make conclusion 	<ul style="list-style-type: none"> Hypotheses Normal distribution calculation Normal condition not met. Use simulation to estimate and interpret p-value Make conclusion

REMINDERS • Always include context • Always show work • Don't leave any blank