

### Top 10 Tips for the 2020 AP® Statistics Exam

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## #10. You gotta talk the talk

Watch your language!

Misuse of term → mandatory deduction

 Avoid using confounding, biased, skewed as synonym for "bad";

Blocking vs. stratified sampling; (approximately) Normal

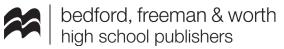
And your notation...

Misuse of symbols → mandatory deduction

- Using p or  $\hat{p}$  when talking about a mean, using  $\mu$  instead of  $\bar{x}$
- Advice:
  - Learn the vocab and the notation
  - Only use terms and symbols you know: Better to explain in your own words than to use a term or symbol incorrectly
  - ALWAYS include CONTEXT in your responses!

# #9. Prepare your workspace

- Print out Formula Sheet & Tables. New for 2020.
- Have your calculator charged and ready.
- Study in this location ahead of time.



### #8. Manage your time!

Two free response questions:

Question 1 25 minutes ≈ 55% of exam weight Upload time 5 minutes
 Question 2 15 minutes ≈ 45% of exam weight Upload time 5 minutes

- Don't spend too much time on an individual part of a question.
- Don't get stressed if you feel uncertain or confused on a part or two.
- But try not to leave any parts blank.

# #7. Practice with your technology

- Computer/phone for uploading and downloading.
- Must use the same device for accessing questions and uploading answers.
- Get familiar with the testing platform.
- Get more info here: <u>apcentral.collegeboard.org/pdf/aptesting-guide-2020.pdf</u>

# #6. Know your inference!

- Practice identifying the appropriate inference method for a given setting.
  - Larry Green's <u>applet</u> and TPS handout
- Be sure you can manage each component in the 4step inference process.

How to Organize an Inference Problem: The Four-Step Process		
	Confidence intervals	Significance tests
STATE:	State the parameter you want to estimate and the confidence level.	State the hypotheses you want to test and the significance level, and define any parameters you use.
PLAN:	Identify the appropriate inference method and check conditions.	Identify the appropriate inference method and check conditions.
DO:	If the conditions are met, perform calculations.	If the conditions are met, perform calculations.
		<ul> <li>Give the sample statistic(s).</li> </ul>
		<ul> <li>Calculate the standardized test statistic.</li> </ul>
		• Find the <i>P</i> -value.
CONCLUDE:	Interpret your interval in the context of the problem.	Make a conclusion about the hypotheses in the context of the problem.

#5. Naked answer = no credit

**Directions:** Show all your work. Indicate clearly the methods you use, because you will be graded on the correctness of your methods as well as on the accuracy and completeness of your results and explanations.

# #4. Focus on statistical thinking

- Be prepared to go beyond fill-in-the-blank interpretations.
- Practice applying concepts, skills, and definitions in context.
- Think about How and Why things work the way they do.
- Don't worry about calculator techniques (this year).

# #3. Don't write too much!

- Less is more...
- Answer the question in context, then shut up!
- Avoid parallel solutions—students will be graded based on the weakest response.
- Don't interpret the *P*-value or confidence *level* unless asked to.
- Don't argue with the question writers—believe what they tell you (e.g., conditions are met)

#### #2. RTQ & ATQ!!

- If a question asks you to...make sure you...
  - Describe a distribution of quantitative data (Shape, Outliers, Center, Spread/Variability)
  - Compare distributions (use comparison words)
  - Describe similarities and differences
  - Explain or justify
  - Choose between options (must address each)
  - Do more than one thing (e.g., identify <u>and</u> interpret slope, state <u>and</u> check conditions...)

## #1. Be prepared and be confident!

- Take advantage of exam review and preparation resources, including:
  - Cumulative AP® Practice Tests 1, 2, 3 from The Practice of Statistics
  - AP® Classes and Review on YouTube Live: <a href="http://youtube.com/advancedplacement">http://youtube.com/advancedplacement</a>
  - Stats Medic Exam Review Course
  - AP® Classroom Question Bank
  - Khan Academy AP® Statistics practice
- Identify weak spots and focus on fixing them

#### AP® Statistics Exam Tips

- #10. You gotta talk the talk.
- #9. Prepare your workspace.
- #8. Manage your time!
- #7. Practice with your technology.
- #6. Know your inference!
- #5. Naked answer = no credit
- #4. Focus on statistical thinking.
- #3. Don't write too much!
- #2. RTQ & ATQ!!
- #1. Be Prepared and be confident!

QUESTIONS???



#### During Webinar: Write questions in chat and choose Send questions to staff

- Stay tuned for follow-up email with recording (and how to share with students), slides, and Q&A doc
- For sales questions or info about The Practice of Statistics contact your sales rep: go.bfwpub.com/FindMyRep
  - Going Virtual support and more: bfwpub.com/Covid19
- For anything else, or questions after the webinar, email: hsmarketing@bfwpub.com



Thank you!