How to Not Screw Up on the AP Exam

i.e. How to Pass
#1: Time management

• Section 1:
  – 1 hr 30 min / 40 multiple-choice questions
  – About 2 min / question

• Section 2:
  – 1 hr 30 min / 4 free-response questions
  – About 22 min / question
    • Usually 2 parts / question
    • About 11 min / question
#2: Attempt all the questions

• No deductions for incorrect answers on the multiple-choice portion
• Make educated guesses if you don’t know the answer
• Make wild guesses if you can’t make educated guesses
#3: You don’t need computers

• Hand trace code for complicated problems
• Simplify complicated array questions by hand tracing code with smaller array of 2 or 3 elements
• Same for matrices
• Easy to figure out if it works
**#4: Be sure**

- Many questions ask you to compare two pieces of code that supposedly implement the same algorithm.
- Often one will fail because it doesn’t handle endpoint conditions properly (e.g. `num == 0`)
- Keep a lookout for endpoint conditions; don’t get tricked because you’re rushing
#5: Use the quick reference

- You are given a copy of the standard Java classes and interfaces with methods
- This is your cheat sheet; it tells you what some of the more obscure methods do
- Especially useful for FRQs
#6: Skim the FRQs before you begin

• Each FRQ is worth 9 points
• Start with the one you feel most comfortable with (gives you a psychological leg up)
• Your brain will work on the other problems subconsciously
• If you run out of time, you’ll be running out of time on the one you had trouble answering anyway
#7: Go for partial credit

- Partial credit is awarded for FRQs
- Part (a) and Part (b) are graded independently
- You can be awarded points for anything you do right
  - E.g. Correct class declaration, correct method header, correct default return value, correct for loop
#8: Use what you got

- Use public methods provided in the question when possible and necessary
- Rewriting existing methods will not get you full credit
- Use methods from quick reference
  - Look at quick reference if you forgot how to use a method or what the parameters are
- You may use other standard Java library methods if you know them, but questions can be answered with only the AP Java subset
#9: Follow directions

• If an algorithm is given or suggested, follow it
• Don’t do something complicated (and possibly stupid)
• Make sure you meet requirements of the question
  – Correct post-condition or correct return value
#10: Just hack

- Don’t write comments, chances are they will be ignored
- Brief comments for self-clarification are okay
- Write code that works; it doesn’t matter if it is efficient or not (unless specified)
#11: Don’t cross it out (yet)

- Don’t cross any answers out unless you have a replacement for it
- Graders are instructed not to read anything crossed out, even if it is correct
#12: Humans are only human

- You are writing FRQ answers for humans, not computers
- Make sure humans can read and understand your answer
  - Write legibly
  - Indent correctly
  - Make appropriate variable/method names
  - Use correct variable/method names
  - Make your code readable, not convoluted
  - Just because it works doesn’t mean it’s clear
#13: Avoid penalties

- 1-point penalty for the following:
  - Extraneous code that causes side effects (e.g. `System.out.println()`, compile errors)
  - Local variables used but none declared
  - Destruction of persistent data (e.g. changing value referenced by parameter)
  - Void method or constructor that returns a value
#14: We forgive you

- Don’t intentionally do stupid things but occasional mistake on FRQs is okay
- Most semicolons are there
- No ambiguity
- No extra side effects
- Algorithms make sense
#15: Get 38%

- 77% for a score of 5
- 55% for a score of 4
- 38% for a score of 3
- 31% for a score of 2
- Anything lower is a 1

- Multiple-choice and FRQ are 50% each; equally important