AP CSA · UNIT 6 ARRAY · TEACHER ANSWER KEY

Answer Keys & Grading Notes

Objective-aligned exemplars, full-credit models, and the mistakes to watch for. **Do not distribute to students.**

True-up step: the objective sections below are built from the AP learning objectives. Paste your real Code.org prompts into chat and I'll fill exact question-by-question keys. The *AI-Proof Worked Answers* section matches the handwritten assignment exactly.

A · Bounds & access

Given int[] a = {5,8,2,9}	Answer
`a.length`	4
`a[0]`	5
`last valid index`	3 (length-1)
`a[4]`	ArrayIndexOutOfBoundsException
`a[a.length-1]`	9

Common mistakes: Using a.length() (arrays use a.length, no parens); accessing a[length] (out of bounds); 1-indexing.

B · Standard algorithms

Full-credit exemplar: Max: start with a[0], loop from 1, keep the larger. Sum: total=0, add each. Count: counter++ when condition true. Use enhanced-for when you don't need the index.

Common mistakes: Initializing max to 0 (fails for all-negative); using for-each when you need to modify by index; off-by-one bounds.

AI-Proof Worked Answers — Array — Handwritten FRQ

Grade the handwritten sheet against these. Item numbers match the assignment.

Item	Correct answer
`1) total after each x`	5→5, 8→13, 2→13, 9→22, 4→22
`1) final total`	22 (only 5, 8, 9 are > 4)
`2) indexOfMax`	int maxI=0; for(int i=1;i<a.length;i++) if(a[i]>a[maxI]) maxI=i; return maxI;
`3) length vs length()`	arrays use a.length (a field, no parens); Strings use s.length() (a method)