

Lesson 80: Picture Lab #5 (W26D3)

Balboa High School

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- Have your solutions to the A8 HW exercises ready to be checked.
 - #1: Show result of provided tester method running your `copyPartial()` method. (2pts)
 - #2: Show your collage. (3pts: 2 for completion, 1 for creativity)
- Read §A9 (pp21-22) in the [student manual](#).
 - When running `testEdgeDetection()`, try modifying argument passed to `edgeDetection()` up and down from 10, observe results.
 - Do higher or lower values make algorithm more sensitive to color differences?

Aim

Students will gain more experience with 2D arrays and learn about digital images via the College Board's *Picture Lab*.

Solutions to the A8 Exercises

Let's go over the solutions to §A8: [teacher-only link](#).

A9: Simple Edge Detection

Do exercise 1 on p22:

- Make a copy of `edgeDetection()` called `edgeDetectionImproved()` and modify the tester class to call it.
- The student manual suggests you add a second loop to test the difference between a current pixel and one below it. This can also be done using the existing nested `for()` loops if you change the `if()-else` statements into `if()-else if()-else`.
- See the results of the better edge detection [here](#).

A9: Simple Edge Detection

Do exercise 2 on p22:

- Brainstorm ways of better detecting edges with other students.
- Collectively or by yourself, implement and test your new method.

- Finish exercises 1 & 2 (p22) in §A9
- Due next class