

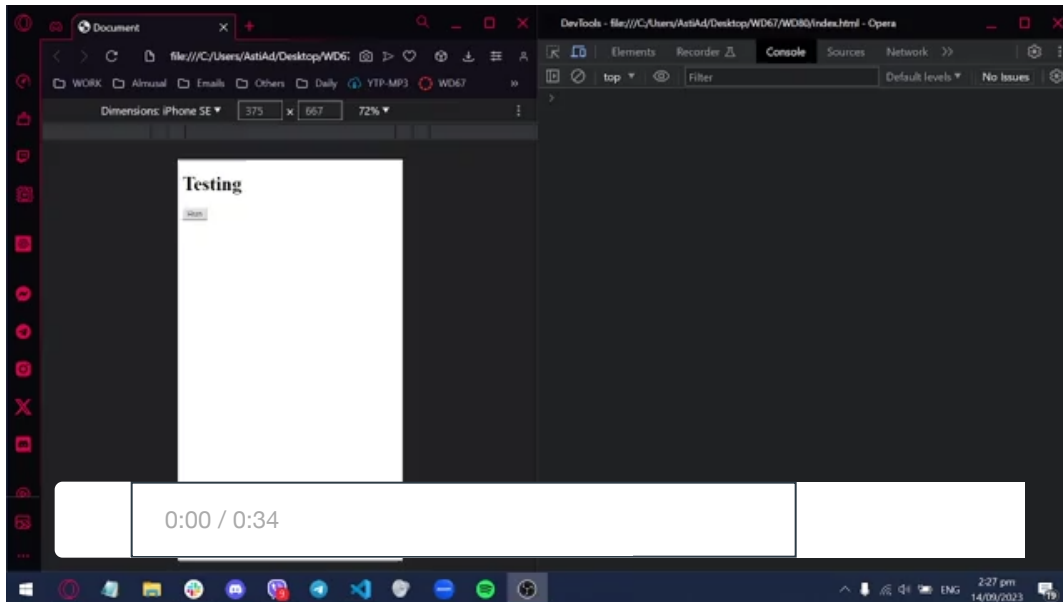
# ACT #32 Shape Solver

New Attempt

**Due** No Due Date    **Points** 35    **Submitting** a file upload    **File Types** js

**SOFT DEADLINE: 11/30/2023 3:05 PM**

**HARD DEADLINE: 11/30/2023 3:10 PM**



## Instruction

Create a program that solves for the area of a specified shape.

## Tools

JavaScript, HTML, Visual Studio Code

## Description

- [Follow the Submit Your Work steps. \(https://kodego.instructure.com/courses/379/pages/7-dot-1-essential-javascript-functions?module\\_item\\_id=17474\)](https://kodego.instructure.com/courses/379/pages/7-dot-1-essential-javascript-functions?module_item_id=17474)
- Name your JavaScript program **area.js**
- Write the script that does the following:
  1. Ask the user what they want to solve for:

- The area of a triangle
  - The area of a circle
  - The area of a rectangle
  - The user would only need to enter a number to make their selection (i.e. (1) triangle, (2) circle, (3) rectangle)
2. Upon selecting one, ask the user for the necessary measurements for the formula.
    - For the triangle, the **base** and **height**.
    - For the circle, the **radius**.
    - For the rectangle, the **length** and **width**.
  3. Using the respective formula, get the area.
    - For the triangle,  $1/2 (b * h)$
    - For the circle,  $3.1416 * r \text{ squared}$
    - For the rectangle,  $l * w$
  4. Display the answer via the console.
    - Don't just display the answer as is. Format it as a sentence (i.e. The area of the shape is...).
- Submit your JavaScript file only here.

## Validation

- Aside from the requirements stated above, the program should also display an error message in the case of...
  - The user entering an incorrect number when prompted for a shape (i.e. they enter 0 or 4 even though the choices are only 1, 2, and 3)

## Test Cases

- You can try these out to check if your program is working correctly.

Input	Result
Prompt #1: 1 Prompt #2: 4 Prompt #3: 10	The area of the triangle is 20.
Prompt #1: 2 Prompt #2: 62.5	The area of the circle is 12271.875.
Prompt #1: 3 Prompt #2: 3 Prompt #3: 4	The area of the rectangle is 12.

Prompt #1: 4	Error message
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