*keep track of what level they are on? once page has loaded initialize to level 1 Have array of numbers





*like the idea in picture 2 Score, timer, restart button displayed at top Equation = [answer box]

Answer button

Page loads with

→ home page

"start" button for level 1

Description of how the game and maybe an example of what it will look like so that the user isn't caught off guard

 \rightarrow Initialize gameScore = 0 and level = 1;

→ run game function

Initialize timer and level score

Start timer countdown (30 second rounds)

Load problem function until timer runs out

Click "answer" button

Timer runs out

Display the score they got on that round, level score

Check score to see if they can move to next level

"Retry" level or "next level" button

If next level button, add level score to game score

→ load problem function (int level)

Based on what level they're on, we will only randomize up to a certain index in the array (ex level 1: 0-9; level 2: 5-20; level 3; 15-25)

Switch case

1: level 1

Set gameScore = 0;

Randomize number between ..., var x

Randomize number between ..., var y

2: level 2

3: level 3

Randomize number 1-3 to pick addition, multiplication, subtraction, use switch case to display equation (var problem)

Switch case

Calculate answer, var solution

1: addition

2: subtraction

3: multiplication

→ "Answer" button

What's in the answer box will be var answer

Run answer function

→ answer function (var solution, var answer, var level)

- If answer is correct

Give a certain number of points(depends on what level) to levelScore for answering the problem correctly

Loads next problem

- If the answer is incorrect

display "Try again!"

Resets answer box

→ "restart" button

Displayed in game that clears variables and runs game function again from the beginning

- Set the level score equal to 0
- Revert back to start page

→ "retry" button

Reloads that same level, run game function

Reset level score, keep game score the same

→ "next level" button

reset variables

Increase var level by 1

Run game function

After they have completed all 3 levels → display a congratulations & show game score

→ Prompt the user to play again and better there score

- → Run playGame function
- → Or return to the main page

Variables

*names can change

var x: 1st number in problem

var y: 2nd problem

var solution: actual answer to problem var answer: player's answer to problem

var level: keeps track of what level player is on

var problem: multiplication, subtraction or addition sign

var gameScore: total game score

var levelScore