<!DOCTYPE html>

<html>

<head>

<meta charset="UTF-8">

<title>Math Falling Game</title>

<script src="https://cdnjs.cloudflare.com/ajax/libs/p5.js/1.6.0/p5.js"></script>

</head>

<body>

<script>

let questions = [];

let userInput = "";

let score = 0;

function setup() {

createCanvas(600, 400);

textSize(24);

generateQuestion();

}

function draw() {

background(255);

// Draw score and input

fill(0, 150, 0);

text("Score: " + score, 10, 30);

fill(200, 0, 0);

text("Your Answer: " + userInput, 10, height - 20);

// Draw questions

for (let i = questions.length - 1; i >= 0; i--) {

let q = questions[i];

fill(0);

text(q.text, q.x, q.y);

q.y += 1; // falling speed

if (q.y > height) {

questions.splice(i, 1);

generateQuestion();

}

}

}

function keyPressed() {

if (keyCode === ENTER) {

for (let i = questions.length - 1; i >= 0; i--) {

if (userInput === questions[i].answer) {

score++;

questions.splice(i, 1);

generateQuestion();

}

}

userInput = "";

} else if (keyCode === BACKSPACE) {

userInput = userInput.slice(0, -1);

} else if ((key >= '0' && key <= '9') || key === '-') {

userInput += key;

}

}

function generateQuestion() {

let a = int(random(1, 10));

let b = int(random(1, 10));

let ops = ['+', '-']; // kid-friendly (no multiplication)

let op = random(ops);

let ans;

if (op === '+') ans = a + b;

else ans = a - b;

questions.push({

text: a + " " + op + " " + b,

answer: ans.toString(),

x: random(50, width - 100),

y: 0

});

}

</script>

</body>

</html>