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<!DOCTYPE html>
<html lang="ja">
<head>
  <meta charset="UTF-8">
  <title>2 次方程式の求解</title>
  <script>
    function answer() {
      let a = document.getElementById('a').value;
      let b = document.getElementById('b').value;
      let c = document.getElementById('c').value;
      let d = b * b - 4 * a * c;
      const answer = document.getElementById('answer');
      if (d > 0) {
        let x1 = (-1.0 * b + Math.sqrt(d)) / (2.0 * a);
        let x2 = (-1.0 * b - Math.sqrt(d)) / (2.0 * a);
        answer.innerHTML = "<p>x = " + x1 + ", " + x2 + "</p>";
      } else if (d === 0) {
        let x1 = (-1.0 * b + Math.sqrt(d)) / (2.0 * a);
        answer.innerHTML = "<p>x = " + x1 + "</p>";
      } else {
        answer.innerHTML = "<p>解なし</p>";
      }
    }
  </script>
</head>
<body>
  <h1>2 次方程式の求解</h1>
  <div id="formula">
    <input type="number" id="a" style="width: 4em;">
    x<sup>2</sup> +
    <input type="number" id="b" style="width: 4em;">
    x +
    <input type="number" id="c" style="width: 4em;">
    = 0<br>
    <input type="button" value="計算" onclick="answer();" style="margin-top: 10px;">
  </div>
  <div id="answer"></div>
</body>
</html>

```

▲コード 1 2 次方程式の求解をするプログラムのソースコード

```

<!DOCTYPE html>
<html lang="ja">
<head>
  <meta charset="UTF-8">
  <title>関数のグラフ表示</title>
  <script>
    function draw(myForm) {
      for (var x = -10; x < 10; x += 0.025) {
        let y1 = eval(myForm.func.value);
        x += 0.025;
        let y2 = eval(myForm.func.value);
        x -= 0.025;
        point.moveTo(x * 20 + 200, 200 - y1 * 20);
        point.lineTo(x * 20 + 200.05, 200 - y2 * 20);
        point.stroke();
      }
    }
  </script>
</head>
<body>
  <h1>関数のグラフ表示</h1>
  <form>
    <input type="text" id="formula" name="func">
    <input type="button" value="描画" onclick="draw(this.form);" style="margin-top: 10px;"><br>
  </form>
  <canvas id="field" width="400" height="400" style="background-color: #eeeeee;"></canvas>
  <script>
    let formula = document.getElementById('formula');
    let canvas = document.getElementById('field');
    let point = canvas.getContext('2d');
    point.moveTo(0, 200);
    point.lineTo(400, 200);
    point.stroke();
    point.moveTo(200, 0);
    point.lineTo(200, 400);
    point.stroke();
  </script>
</body>
</html>

```

▲コード 2 関数のグラフ表示をするプログラムのソースコード