Calculating the Perimeter of a Shape

Quiz, 7 questions

1 point

1.
What is the perimeter of the shape made from the file **datatest4.txt** whose contents are shown below (just give to two decimal places)?

-3, 9

-8, 7

-12, 4

-6, -2

-4, -6

2, -8

6, -5

10, -3

8, 5

4, 8

Enter answer here

1 point

Calculating the Perimeter of a Shape

Quiz, 7 questions

2.

What is the average length of a side in the shape made from the file **datatest4.txt** whose contents are shown below (just give to two decimal places)?

-3, 9

-8, 7

-12, 4

-6, -2

-4, -6

2, -8

6, -5

10, -3

8, 5

4, 8

Enter answer here

1 point

3.

What is the longest side in the shape made from the file **datatest4.txt** whose contents are shown below (just give to two decimal places)?

-3, 9

-8, 7

-12, 4

-6, -2

-4, -6

2, -8

6, -5

10, -3

8, 5

4, 8

Enter answer here

Calculating the Perimeter of a Shape

Quiz, 7 questions

1 point

4.

What is the largest perimeter of a shape made from the shapes in files **example1.txt, example2.txt, example3.txt and example4.txt** (just give to two decimal places)?

Enter answer here

1 point

5.

What is the name of the file that has the shape with the largest perimeter from the six files **dataset1.txt, dataset2.txt, dataset3.txt, dataset4.txt, dataset5.txt, and dataset6.txt**?

- dataset1.txt
- dataset2.txt
- dataset3.txt
- dataset4.txt
- dataset5.txt
- dataset6.txt

1 point

6.

The method getNumPoints returns the number of points in a Shape s.

Which one of the following is NOT a correct implementation of getNumPoints?

```
1  public int getNumPoints (Shape s) {
2    int count = 0;
3    for (Point p : s.getPoints()) {
4      int newPoint = 1;
5      count = count + newPoint;
6    }
7    return count;
8  }
```

Calculating the Perimeter of a Shape

Quiz, 7 questions

```
1  public int getNumPoints (Shape s) {
2    int count = 0;
3    for (Point p : s.getPoints()) {
4      count = count + 1;
5    }
6    return count;
7  }
```

```
1  public int getNumPoints (Shape s) {
2    int count = 0;
3    int newPoint = 1;
4    for (Point p : s.getPoints()) {
5      count = count + newPoint;
6    }
7    return count;
8  }
```

```
1  public int getNumPoints (Shape s) {
2    int count = 0;
3    for (Point p : s.getPoints()) {
4      count = count + count;
5    }
6    return count;
7  }
```

1 point

7.

Consider the following code for the function mysteryShape that has one parameter a Shape s and calls the function getNumPoints from the assignment.

```
1  public double mysteryShape (Shape s) {
2    double tmp = 0;
3    for (Point p : s.getPoints()) {
4
5      if (p.getX() > 0) {
6
7        if (p.getY() < 0) {
8          tmp = tmp + 1;
9        }
10     }
11   }
12   return tmp / getNumPoints(s);
13 }
14
15
```

Which one of the following best describes the purpose of this function?

- The function computes the **percentage** of those points from the Shape s that have a **positive X** or a **negative Y**.
- The function computes the **sum** of those points from the Shape s that have a **positive X** and a **negative** Y.
- The function computes the **percentage** of those points from the Shape s that have a **positive X** and a **negative Y**.
- The function computes the **sum** of those points from the Shape s that have a **positive X** or a **negative Y**.

I, **Maruf Hassan**, understand that submitting work that isn't my own may result in permanent