

Marking Guide for J1 - Trident

Award three points for each test case that is correctly solved.

Test Case 1

Enter tine length:

2

Enter tine spacing:

3

Enter handle length:

4

```
*   *   *
*   *   *
*****
      *
      *
      *
      *
```

Test Case 2

Enter tine length:

4

Enter tine spacing:

3

Enter handle length:

2

```
*   *   *
*   *   *
*   *   *
*   *   *
*****
      *
      *
```

Test Case 3

Enter tine length:

1

Enter tine spacing:

5

Enter handle length:

1

```
*       *       *
*****
      *
```

Test Case 4

Enter tine length:

10

Enter tine spacing:

10

Enter handle length:

10

```
*           *           *
*           *           *
*           *           *
*           *           *
*           *           *
*           *           *
*           *           *
*           *           *
*           *           *
*           *           *
*****
*
*
*
*
*
*
*
*
*
```

Test Case 5

Enter tine length:

0

Enter tine spacing:

0

Enter handle length:

0

Marking Guide for J2 - Picture Perfect

Award three points for each test case that is correctly solved.

Note: the dimensions of the rectangle may be printed in any order. For example, both "6 x 10" and "10 x 6" are acceptable for the first test case.

Enter number of pictures:

60

Minimum perimeter is 32 with dimensions 6 x 10

Enter number of pictures:

100

Minimum perimeter is 40 with dimensions 10 x 10

Enter number of pictures:

23

Minimum perimeter is 48 with dimensions 1 x 23

Enter number of pictures:

1

Minimum perimeter is 4 with dimensions 1 x 1

Enter number of pictures:

64507

Minimum perimeter is 1016 with dimensions 251 x 257

Enter number of pictures:

0

Marking Guide for J3/S1 - Snakes and Ladders

Test Case 1

Award one point for each correct step. (10 points in total)

Enter sum of dice:

10

You are now on square 11

Enter sum of dice:

8

You are now on square 19

Enter sum of dice:

11

You are now on square 30

Enter sum of dice:

10

You are now on square 64

Enter sum of dice:

3

You are now on square 86

Enter sum of dice:

5

You are now on square 91

Enter sum of dice:

8

You are now on square 77

Enter sum of dice:

12

You are now on square 89

Enter sum of dice:

12

You are now on square 89

Enter sum of dice:

11

You are now on square 100

You Win!

Test Case 2

Award one point for each correct step, including "You Quit!". (5 points in total)

Enter sum of dice:

8

You are now on square 34

Enter sum of dice:

11

You are now on square 45

Enter sum of dice:

9

You are now on square 19

Enter sum of dice:

4

You are now on square 23

Enter sum of dice:

0

You Quit!

Marking Guide for J4/S2 - Poetry

Award one point for each correct line. (15 points in total)

Test Case 1 (File: POETRY1.IN)

perfect

Test Case 2 (File: POETRY2.IN)

free

even

cross

perfect

Test Case 3 (File: POETRY3.IN)

perfect

free

perfect

perfect

shell

Test Case 4 (File: POETRY4.IN)

cross

perfect

shell

even

perfect

Marking Guide for J5/S3 - Floor Plan

Award three points for each correct line. (15 points in total)

Test Case 1 (File: FLOOR1.IN)

5 rooms, 0 square metres left over

Test Case 2 (File: FLOOR2.IN)

0 rooms, 3 square metres left over

Test Case 3 (File: FLOOR2.IN)

5 rooms, 2 square metres left over

Test Case 4 (File: FLOOR2.IN)

1 room, 1 square metre left over

Test Case 5 (File: FLOOR2.IN)

5 rooms, 809 square metres left over

Marking Guide for S4 - Substrings

For test cases 1, 2, and 3, award one point for each correct line. (7 points in total)

Test Case 1 (File: SUBSTR1.IN)

2
15
5
8
11

Test Case 2 (File: SUBSTR2.IN)

499028

Test Case 3 (File: SUBSTR3.IN)

424321

For test cases 4 and 5, award two points for each correct line. (8 points in total)

Test Case 4 (File: SUBSTR4.IN)

1001
499034

Test Case 5 (File: SUBSTR5.IN)

2998
3995

Marking Guide for S5 - Trucking Trouble

Award three points for each correct line. (15 points in total)

Test Case 1 (File: TRUCK1.IN)

100

Test Case 2 (File: TRUCK2.IN)

299

Test Case 3 (File: TRUCK3.IN)

3800

Test Case 4 (File: TRUCK4.IN)

55510

Test Case 5 (File: TRUCK5.IN)

0