## UTCS Invitational 2013 - Programming Problem Difficulty

| Problem <br> $\#$ | Name | Teams <br> Solving | Actual <br> Difficulty | Predicted <br> Difficulty |
| :---: | :---: | :---: | :---: | :---: |
| 1 | Chuck | 33 | 10 | 11 |
| 2 | Count | 21 | 6 | 9 |
| 3 | Cubes | 1 | 1 | 2 |
| 4 | Dimensions | 4 | 3 | 4 |
| 5 | Goals | 31 | 9 | 8 |
| 6 | Grade | 24 | 7 | 7 |
| 7 | Majority | 34 | 11 | 6 |
| 8 | Optimal | 2 | 2 | 3 |
| 9 | Rebate | 27 | 8 | 7 |
| 10 | Royal | 58 | 12 | 12 |
| 11 | Tunnels | 5 | 4 | 1 |
| 12 | Us | 19 | 5 | 10 |

By Number of Teams Solving

| Problem <br> $\#$ | Name | Teams <br> Solving | Actual <br> Difficulty | Predicted <br> Difficulty |
| :---: | :---: | :---: | :---: | :---: |
| 3 | Cubes | 1 | 1 | 2 |
| 8 | Optimal | 2 | 2 | 3 |
| 4 | Dimensions | 4 | 3 | 4 |
| 11 | Tunnels | 5 | 4 | 1 |
| 12 | Us | 19 | 5 | 10 |
| 2 | Count | 21 | 6 | 9 |
| 6 | Grade | 24 | 7 | 7 |
| 9 | Rebate | 27 | 8 | 7 |
| 5 | Goals | 31 | 9 | 8 |
| 1 | Chuck | 33 | 10 | 11 |
| 7 | Majority | 34 | 11 | 6 |
| 10 | Royal | 58 | 12 | 12 |

Histogram of Number of teams that solved given problem. (Problem number on $x$ axis, number of teams solving on $y$ axis)


62 teams competed in programming contest
Statistics for number of problems solved:
Min: 0
Max: 11
Average: 4.2
Median: 4
Number of teams that solved $N$ problems:

| Number of Problems Solved | Number of Teams |
| ---: | ---: |
| 0 | 1 |
| 1 | 12 |
| 2 | 10 |
| 3 | 4 |
| 4 | 11 |
| 5 | 5 |
| 6 | 7 |
| 7 | 3 |
| 8 | 3 |
| 9 | 3 |
| 10 | 1 |
| 11 | 2 |
| 12 | 0 |

Histogram on number of problems solved. $x$ axis is number of teams, $y$ axis is number of problems solved


