# Math Open at Andover 2022 Statistics

The MOAA Team October 8th, 2022

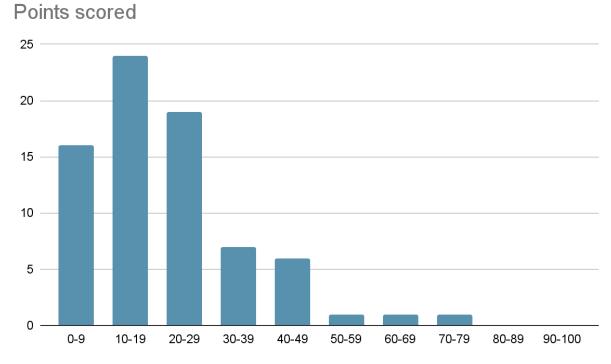
# **Speed Round**

The Speed Round was a 15-problem, 40-minute exam. Problem weights are listed below.

Problem	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Weight	3	3	4	4	4	5	5	5	6	7	8	10	11	12	13

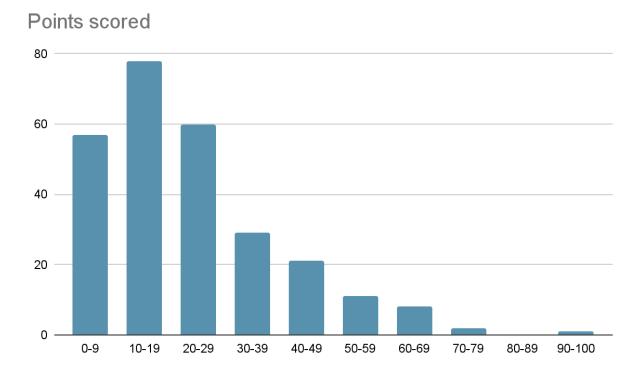
In-Person

Mean: 22.0 First Quartile: 10 Median: 19 Third Quartile: 29 Minimum: 0 Maximum: 87 Mode: 6 Standard Deviation: 16.6



# <u>Virtual</u>

Mean: 22.9 First Quartile: 10 Median: 19 Third Quartile: 32 Minimum: 0 Maximum: 90 Mode: 6 Standard Deviation: 16.6



# Accuracy Round

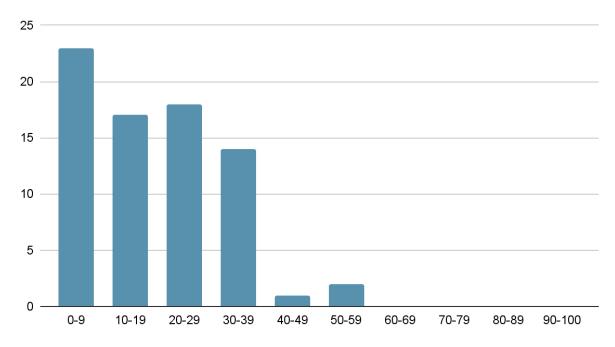
The Accuracy Round was a 10-problem, 50-minute exam. Problem weights are listed below.

Problem	1	2	3	4	5	6	7	8	9	10
Weight	4	4	5	6	8	10	13	16	16	18

In-Person

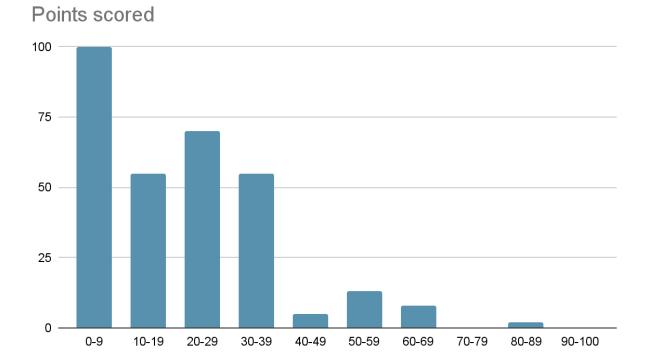
Mean: 18.0 First Quartile: 8 Median: 16 Third Quartile: 27 Minimum: 0 Maximum: 50 Mode: 4 Standard Deviation: 12.6

Points scored



#### <u>Virtual</u>

Mean: 21.1 First Quartile: 8 Median: 19 Third Quartile: 31 Minimum: 0 Maximum: 84



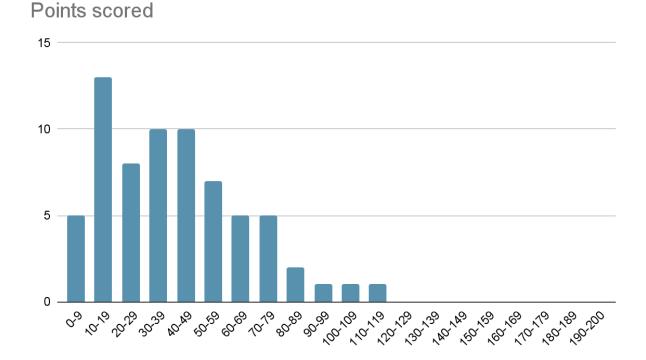
# Mode: 4

# **Individual Total**

The Individual Total score for each competitor is the sum of speed and accuracy scores.

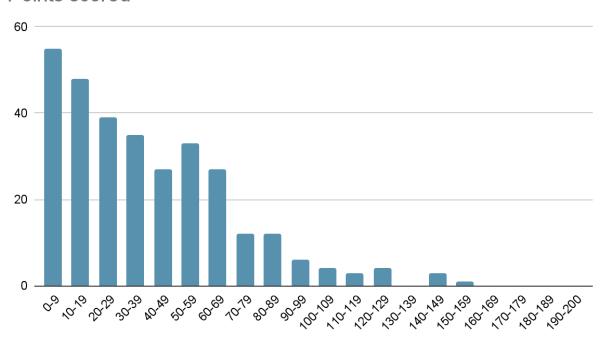
#### In-Person

Mean: 40.3 First Quartile: 19 Median: 38 Third Quartile: 57.5 Minimum: 0 Maximum: 113 Mode: 10 Standard Deviation: 26.0



### <u>Virtual</u>

Mean: 41.2 First Quartile: 15 Median: 37 Third Quartile: 60 Minimum: 0 Maximum: 151 Mode: 4 Standard Deviation: 32.4 Points scored



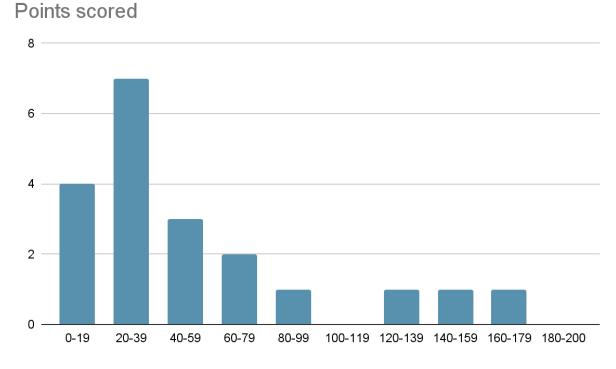
### **Team Round**

The Team Round was a 10-problem, 40-minute exam. Problem weights are listed below.

Problem	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Weight	5	5	7	8	10	15	20	20	25	30	35	50	50	50	70

In-Person

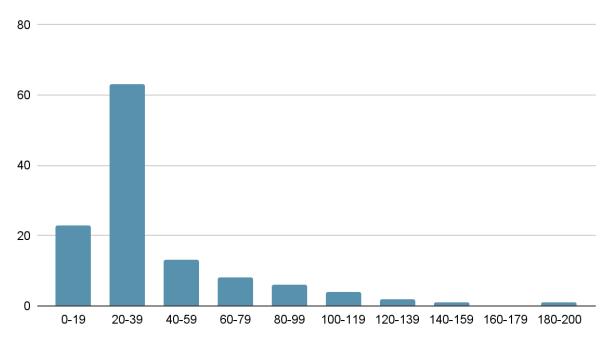
Mean: 51.7 First Quartile: 23.5 Median: 35 Third Quartile: 67.5 Minimum: 5 Maximum: 160 Mode: 15, 27, 35, 42 Standard Deviation: 43.1



### <u>Virtual</u>

Mean: 37.7 First Quartile: 18 Median: 27 Third Quartile: 50 Minimum: 0 Maximum: 190 Mode: 30, 0 Standard Deviation: 33.8

# Points scored



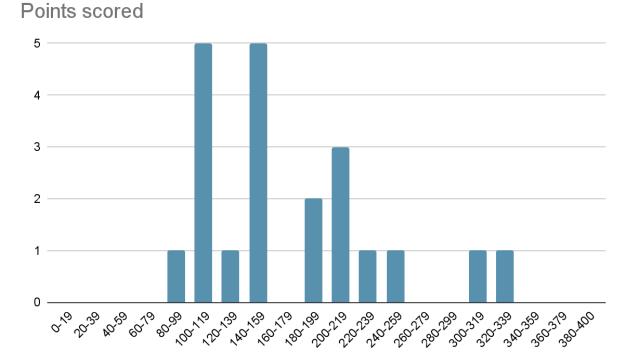
### **Gunga Bowl**

The Guts Round was a 27-problem, 75-minute exam. Problem weights are listed below.

Round	1	2	3	4	5	6	7	8	9
Weight	8	10	12	14	16	18	20	22	30

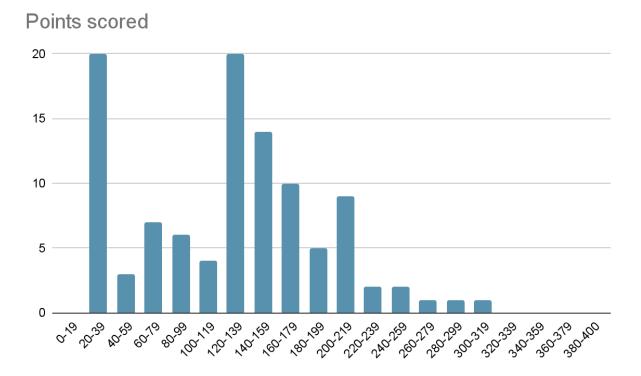
In-Person

Mean: 176.8 First Quartile: 117 Median: 157 Third Quartile: 216 Minimum: 100 Maximum: 338 Mode: 108 Standard Deviation: 65.0



### <u>Virtual</u>

Mean: 105.7 First Quartile: 24 Median: 106 Third Quartile: 155 Minimum: 24 Maximum: 302 Mode: 24 Standard Deviation: 72.3

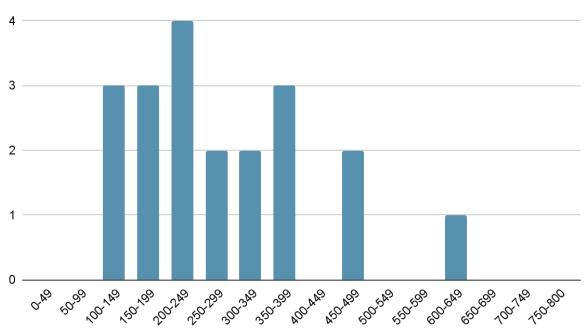


### **Team Sweepstakes**

The Team Sweepstakes score is the sum of the two times the average Individual Total score, the Team Round score, and the Gunga Bowl score.

#### In-Person

Mean: 284.0	Minimum: 124
First Quartile: 178	Maximum: 645
Median: 260	Mode: 284
Third Quartile: 362	Standard Deviation: 134.2



### Points scored

#### <u>Virtual</u>

Mean: 200.9 First Quartile: 118 Median: 193 Third Quartile: 261 Minimum: 24 Maximum: 633 Mode: 190 Standard Deviation: 109.8 Points scored

