

25th Annual UNC MATH CONTEST: SUMMARY OF FIRST ROUND RESULTS November 2016

A total of 1215 students participated this year. The highest possible score was 100. Four participants scored 100: two in grade 12, one in grade 10, and one in grade 9. Another fifteen students scored 90 or above. There were 22 students who gave the correct answer to the password question, #10, including at least one from each grade 6-12. There were several more who were clearly on the right track. The table below shows the minimum qualifying scores required for invitation to the Final Round for each grade. It also shows, by grade, the number of students who participated and the number invited to the Final Round.

Grade	4,5,6	7	8	9	10	11	12	Total
Qualifying score	40	40	45	50	55	55	55	
Number of qualifiers	10	30	42	32	33	30	39	216
Number of participants	89	316	336	117	104	116	137	1215

Number of students who answered each question correctly:

	1. Day	2. (a)	2. (b)	3. P	4. P or L	\$	5. Balls	6. Tutu	7. Hour	7. Min	7. Sec	8. BOB	9. P(2)=	10. Passwords
Answer	3	12	804	68	Loss	6	401	10	12	16	22	1098	17	204,768,420
Points	10	5	5	10	5	5	10	10	3	3	4	10	10	10
#Correct	702	661	689	432	538	615	400	79	719	256	133	161	86	22
%Correct	58%	54%	57%	36%	44%	51%	33%	7%	60%	21%	11%	13%	7%	2%

Scoring procedures. Each numbered question is worth 10 points, as usual. No deduction is made for including units when asked not to. The answers are checked for that kind of irregularity and credit is assigned as appropriate. We read all your comments, also.

Congratulations! Thanks to all the teachers, parents, and students who participated. A complete current set of problems and solutions is now available on the contest website: www.uncmathcontest.wordpress.com

2016 SUMMARY OF FIRST ROUND RESULTS Number of students who answered each question correctly, by grade:

	1	2. (a)	2. (b)	3	4	\$	5	6	7. H	7.M	7. S	8	9	10
Answer	3	12	804	68	Loss	6	401	10	12	16	22	1098	17	204,768,420
All grades														
% Correct	58%	54%	57%	36%	44%	51%	33%	7%	59%	21%	11%	13%	7%	2%
Grade 12														
# Correct	99	97	94	83	74	90	62	23	92	51	29	33	16	5
% Correct	72%	71%	69%	61%	54%	66%	45%	17%	67%	37%	21%	24%	12%	4%
Grade 11														
# Correct	81	75	75	65	55	62	47	12	76	31	24	31	19	6
% Correct	70%	65%	65%	56%	47%	53%	41%	10%	66%	27%	21%	27%	16%	5%
Grade 10														
# Correct	65	77	72	59	60	74	56	18	74	37	22	24	19	7
% Correct	63%	74%	69%	57%	58%	71%	54%	17%	71%	36%	21%	23%	18%	7%
Grade 9														
# Correct	65	84	72	59	63	72	49	10	69	35	24	28	14	1
% Correct	56%	72%	62%	50%	54%	62%	42%	9%	59%	30%	21%	24%	12%	1%
Grade 8														
% Correct	166	170	196	88	145	164	101	8	209	70	25	24	8	1
% Correct	49%	51%	58%	26%	43%	49%	30%	2%	62%	21%	7%	7%	2%	0%
Grade 7														
# Correct	187	130	147	66	107	120	68	8	155	23	7	17	8	1
% Correct	59%	41%	46%	21%	34%	38%	21%	3%	49%	7%	2%	5%	3%	0%
Grade 6														
# Correct	35	27	29	10	32	31	15	0	42	9	2	4	2	1
% Correct	43%	33%	36%	12%	40%	38%	19%	0%	52%	11%	2%	5%	2%	1%

2016 SUMMARY OF FIRST ROUND RESULTS

Percentiles, for all participants and also by grade. This table shows the percent of participants in each grade scoring below the indicated scores. There were participants in grades 4 and 5, but there were too few to make percentile information meaningful. In comparing across grades, bear in mind that at some middle schools the contest is given to whole math classes, while in high schools the contest is more usually offered only to those students who are passionate about math.

Score	All grades	Grade 12	Grade 11	Grade 10	Grade 9	Grade 8	Grade 7	Grade 6
100	99.67%	98.54%	100%	99.04%	99.15%	100%	100%	100%
90	98%	96%	97%	94%	98%	100%	100%	99%
80	96%	89%	89%	92%	94%	99%	100%	99%
70	93%	87%	82%	78%	87%	98%	98%	99%
60	90%	81%	74%	73%	80%	97%	98%	99%
50	83%	65%	71%	62%	73%	91%	95%	96%
40	75%	53%	61%	55%	61%	81%	91%	90%
30	60%	41%	48%	42%	48%	65%	75%	73%
20	39%	19%	25%	21%	32%	41%	51%	62%
10	15%	4%	9%	5%	11%	17%	17%	38%
0	3%	1%	2%	0%	1%	3%	4%	11%