Score Tabulation Instructions

Note: You do NOT need these instructions if you are using the electronic version of the engineering presentation score sheet.
   The formulas are already set up for you within Excel

Contents	Tables 1-3
	Score Tabulation Sheet (Table 4)

ENGINEERING PRESENTATION JUDGING INSTRUCTIONS

Please use these instructions if you are using hard copies of the presentation score sheets

You will need:	Judges' Score Sheet

Step 1: Tabulate Category Scores (for each category)

Add the points within each category to get the **Category Raw Total** (document in first column of Table 4)
Use the **Category Raw Total** and the **Raw Points Possible** (Table 1) to look up the **Raw Category %** (Table 2)
Use the **Raw Category %** and the **Category Weight** (Table 1) to look up the **Category Score** (Table 3)
Record **Category Score** (Table 4)

Step 2: Calculate Final Score (Table 4)

Total Score = Sum of the Category Scores
Final Score = Sum + Discretionary Points - Deduction Points

Printing Instructions:

Instructions (pg. 1)	8.5 x 11 Single Sided
Table 1 & 4 (pg. 2)	8.5 x 11 Single Sided (Both tables fit on one page)
Tables 2 & 3 (pg. 3-6)	1 of each table, each will be 1: 11 x 17 Double Sided

Engineering Presentation - Scout/Navigator
Table 1: Category Scoring Info

Category	Raw Points Possible	Category Weight
Safety	12	10%
Team Presentation	52	25%
Theme/Tasks	16	10%
Overall Design and Workmanship	16	10%
Build vs. buy, new vs. used	16	20%
System Design	108	25%
Total	220	100%

Table 4: Recording the Category Score and Tabulating the Final Score

Category	Raw Score	Category Score	
Safety			Tabulate using tables and judges' scores
Team Presentation			
Theme/Tasks			
Overall Design and Workmanship			
Build vs. buy, new vs. used			
System Design			
TOTAL SCORE			Add Category Scores
Discretionary Points			Enter Discretionary Points from score sheet
Deductions			Enter Deductions from score sheet
Final Score			Add Discretionary points and subtract deductions to arrive at the Final Score

Engineering Presentation - Scout/Navigator
Table 2: Finding the Raw Category %

Category Raw Total (from judge score sheet)	Raw Points Possible (from Table 1)						
	4	8	12	16	20	52	108
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	0.25	0.13	0.08	0.06	0.05	0.02	0.01
2	0.50	0.25	0.17	0.13	0.10	0.04	0.02
3	0.75	0.38	0.25	0.19	0.15	0.06	0.03
4	1.00	0.50	0.33	0.25	0.20	0.08	0.04
5	-	0.63	0.42	0.31	0.25	0.10	0.05
6	-	0.75	0.50	0.38	0.30	0.12	0.06
7	-	0.88	0.58	0.44	0.35	0.13	0.06
8	-	1.00	0.67	0.50	0.40	0.15	0.07
9	-	-	0.75	0.56	0.45	0.17	0.08
10	-	-	0.83	0.63	0.50	0.19	0.09
11	-	-	0.92	0.69	0.55	0.21	0.10
12	-	-	1.00	0.75	0.60	0.23	0.11
13	-	-	-	0.81	0.65	0.25	0.12
14	-	-	-	0.88	0.70	0.27	0.13
15	-	-	-	0.94	0.75	0.29	0.14
16	-	-	-	1.00	0.80	0.31	0.15
17	-	-	-	-	0.85	0.33	0.16
18	-	-	-	-	0.90	0.35	0.17
19	-	-	-	-	0.95	0.37	0.18
20	-	-	-	-	1.00	0.38	0.19
21	-	-	-	-	-	0.40	0.19
22	-	-	-	-	-	0.42	0.20
23	-	-	-	-	-	0.44	0.21
24	-	-	-	-	-	0.46	0.22
25	-	-	-	-	-	0.48	0.23
26	-	-	-	-	-	0.50	0.24
27	-	-	-	-	-	0.52	0.25
28	-	-	-	-	-	0.54	0.26
29	-	-	-	-	-	0.56	0.27
30	-	-	-	-	-	0.58	0.28
31	-	-	-	-	-	0.60	0.29
32	-	-	-	-	-	0.62	0.30
33	-	-	-	-	-	0.63	0.31
34	-	-	-	-	-	0.65	0.31
35	-	-	-	-	-	0.67	0.32
36	-	-	-	-	-	0.69	0.33
37	-	-	-	-	-	0.71	0.34
38	-	-	-	-	-	0.73	0.35
39	-	-	-	-	-	0.75	0.36
40	-	-	-	-	-	0.77	0.37
41	-	-	-	-	-	0.79	0.38
42	-	-	-	-	-	0.81	0.39
43	-	-	-	-	-	0.83	0.40
44	-	-	-	-	-	0.85	0.41
45	-	-	-	-	-	0.87	0.42
46	-	-	-	-	-	0.88	0.43
47	-	-	-	-	-	0.90	0.44
48	-	-	-	-	-	0.92	0.44
49	-	-	-	-	-	0.94	0.45
50	-	-	-	-	-	0.96	0.46
51	-	-	-	-	-	0.98	0.47
52	-	-	-	-	-	1.00	0.48
53	-	-	-	-	-	-	0.49
54	-	-	-	-	-	-	0.50
55	-	-	-	-	-	-	0.51
56	-	-	-	-	-	-	0.52
57	-	-	-	-	-	-	0.53

Engineering Presentation - Scout/Navigator Table 2: Finding the Raw Category %							
	Raw Points Possible (from Table 1)						
Category Raw Total (from judge score sheet)	4	8	12	16	20	52	108
58	-	-	-	-	-	-	0.54
59	-	-	-	-	-	-	0.55
60	-	-	-	-	-	-	0.56
61	-	-	-	-	-	-	0.56
62	-	-	-	-	-	-	0.57
63	-	-	-	-	-	-	0.58
64	-	-	-	-	-	-	0.59
65	-	-	-	-	-	-	0.60
66	-	-	-	-	-	-	0.61
67	-	-	-	-	-	-	0.62
68	-	-	-	-	-	-	0.63
69	-	-	-	-	-	-	0.64
70	-	-	-	-	-	-	0.65
71	-	-	-	-	-	-	0.66
72	-	-	-	-	-	-	0.67
73	-	-	-	-	-	-	0.68
74	-	-	-	-	-	-	0.69
75	-	-	-	-	-	-	0.69
76	-	-	-	-	-	-	0.70
77	-	-	-	-	-	-	0.71
78	-	-	-	-	-	-	0.72
79	-	-	-	-	-	-	0.73
80	-	-	-	-	-	-	0.74
81	-	-	-	-	-	-	0.75
82	-	-	-	-	-	-	0.76
83	-	-	-	-	-	-	0.77
84	-	-	-	-	-	-	0.78
85	-	-	-	-	-	-	0.79
86	-	-	-	-	-	-	0.80
87	-	-	-	-	-	-	0.81
88	-	-	-	-	-	-	0.81
89	-	-	-	-	-	-	0.82
90	-	-	-	-	-	-	0.83
91	-	-	-	-	-	-	0.84
92	-	-	-	-	-	-	0.85
93	-	-	-	-	-	-	0.86
94	-	-	-	-	-	-	0.87
95	-	-	-	-	-	-	0.88
96	-	-	-	-	-	-	0.89
97	-	-	-	-	-	-	0.90
98	-	-	-	-	-	-	0.91
99	-	-	-	-	-	-	0.92
100	-	-	-	-	-	-	0.93
101	-	-	-	-	-	-	0.94
102	-	-	-	-	-	-	0.94
103	-	-	-	-	-	-	0.95
104	-	-	-	-	-	-	0.96
105	-	-	-	-	-	-	0.97
106	-	-	-	-	-	-	0.98
107	-	-	-	-	-	-	0.99
108	-	-	-	-	-	-	1.00

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Engineering Presentation - Scout/Navigator
Table 3: Finding the Category Score

Raw Category % (from table 2)	Category Weight (from table 1)			
	5%	10%	20%	30%
0.01	0	0	0	0
0.02	0	0	0	0
0.03	0	0	0	0
0.04	0	0	0	1
0.05	0	0	1	1
0.06	0	0	1	1
0.07	0	0	1	1
0.08	0	0	1	1
0.09	0	0	1	1
0.10	0	1	1	2
0.11	0	1	1	2
0.12	0	1	1	2
0.13	0	1	1	2
0.14	0	1	1	2
0.15	0	1	2	2
0.16	0	1	2	2
0.17	0	1	2	3
0.18	0	1	2	3
0.19	0	1	2	3
0.20	1	1	2	3
0.21	1	1	2	3
0.22	1	1	2	3
0.23	1	1	2	3
0.24	1	1	2	4
0.25	1	1	3	4
0.26	1	1	3	4
0.27	1	1	3	4
0.28	1	1	3	4
0.29	1	1	3	4
0.30	1	2	3	5
0.31	1	2	3	5
0.32	1	2	3	5
0.33	1	2	3	5
0.34	1	2	3	5
0.35	1	2	4	5
0.36	1	2	4	5
0.37	1	2	4	6
0.38	1	2	4	6
0.39	1	2	4	6
0.40	1	2	4	6
0.41	1	2	4	6
0.42	1	2	4	6
0.43	1	2	4	6
0.44	1	2	4	7
0.45	1	2	5	7
0.46	1	2	5	7
0.47	1	2	5	7
0.48	1	2	5	7
0.49	1	2	5	7
0.50	1	3	5	8
0.51	1	3	5	8
0.52	1	3	5	8
0.53	1	3	5	8

Engineering Presentation - Scout/Navigator
Table 3: Finding the Category Score

Raw Category % (from table 2)	Category Weight (from table 1)			
	5%	10%	20%	30%
0.54	1	3	5	8
0.55	1	3	6	8
0.56	1	3	6	8
0.57	1	3	6	9
0.58	1	3	6	9
0.59	1	3	6	9
0.60	2	3	6	9
0.61	2	3	6	9
0.62	2	3	6	9
0.63	2	3	6	9
0.64	2	3	6	10
0.65	2	3	7	10
0.66	2	3	7	10
0.67	2	3	7	10
0.68	2	3	7	10
0.69	2	3	7	10
0.70	2	4	7	11
0.71	2	4	7	11
0.72	2	4	7	11
0.73	2	4	7	11
0.74	2	4	7	11
0.75	2	4	8	11
0.76	2	4	8	11
0.77	2	4	8	12
0.78	2	4	8	12
0.79	2	4	8	12
0.80	2	4	8	12
0.81	2	4	8	12
0.82	2	4	8	12
0.83	2	4	8	12
0.84	2	4	8	13
0.85	2	4	9	13
0.86	2	4	9	13
0.87	2	4	9	13
0.88	2	4	9	13
0.89	2	4	9	13
0.90	2	5	9	14
0.91	2	5	9	14
0.92	2	5	9	14
0.93	2	5	9	14
0.94	2	5	9	14
0.95	2	5	10	14
0.96	2	5	10	14
0.97	2	5	10	15
0.98	2	5	10	15
0.99	2	5	10	15
1.00	3	5	10	15