

Item Analysis for the Forty-Fifth
Michigan Mathematics Prize Competition
Part I, October 10, 2001

problem number	correct answer	percent A	percent B	percent C	percent D	percent E	percent other
1	B	11.4	42.8	8.4	33.8	3.1	0.5
2	D	3.8	1.4	2.0	90.7	1.9	0.1
3	B	20.2	54.7	15.0	5.3	3.0	1.7
4	B	10.1	24.4	36.3	21.1	5.7	2.4
5	D	0.6	16.5	12.7	53.1	16.7	0.4
6	E	11.5	11.2	10.0	32.2	34.7	0.4
7	C	22.9	14.1	27.6	22.6	10.8	2.1
8	A	46.3	20.3	20.1	8.2	4.1	1.0
9	C	2.1	4.4	85.7	3.6	3.9	0.3
10	E	10.8	2.0	3.0	18.3	65.4	0.5
11	D	9.2	6.4	17.1	44.2	22.4	0.8
12	B	6.8	55.6	24.9	9.6	2.6	0.5
13	A	26.9	31.4	12.2	16.8	11.5	1.1
14	B	41.2	32.7	10.3	10.3	3.6	2.0
15	C	4.5	10.1	69.4	8.8	6.7	0.5
16	D	20.7	9.0	12.9	38.7	18.3	0.4
17	C	8.4	21.6	24.8	16.1	28.0	1.2
18	D	4.3	9.4	15.6	20.9	48.4	1.5
19	D	23.1	31.0	21.1	15.0	9.1	0.7
20	E	9.6	12.6	24.1	27.6	24.4	1.8
21	D	15.3	18.6	20.9	34.2	9.8	1.1
22	E	31.3	28.9	16.0	6.3	16.3	1.1
23	B	11.8	28.6	20.0	19.2	19.9	0.5
24	E	3.3	5.8	15.6	15.6	59.1	0.7
25	C	35.5	22.2	20.8	5.7	14.7	1.1
26	A	21.3	16.2	13.3	29.6	17.7	1.9
27	B	14.3	42.3	24.8	12.4	5.4	0.8
28	B	10.7	21.9	26.6	27.4	10.4	3.1
29	B	7.5	34.2	20.1	15.5	22.1	0.6
30	A	54.4	8.9	15.1	9.4	11.3	1.0
31	D	18.0	30.0	26.9	18.5	4.8	1.8
32	A	31.3	22.1	20.4	12.1	12.4	1.7
33	E	7.0	18.8	11.9	9.3	52.1	0.9
34	D	12.9	15.2	25.7	34.5	9.6	2.1
35	E	10.7	8.4	42.8	7.4	29.4	1.2
36	D	11.7	19.0	23.9	27.1	16.8	1.5
37	B	10.2	23.6	20.6	26.3	17.3	2.0
38	C	9.5	12.5	41.1	18.6	16.8	1.6
39	B	25.5	30.8	21.9	14.4	5.6	1.8
40	D	4.1	4.7	4.5	40.6	45.4	0.8