

Contents

Introduction to the First Ten Years: Kane	i
Introduction to the First Ten Years: Andreescu	vii
Introduction to the Next Ten Years	xi
I Problems	1
1 2013 High School Problems	3
2 2013 Middle School Problems	9
3 2014 High School Problems	13
4 2014 Middle School Problems	19
5 2015 High School Problems	25
6 2015 Middle School Problems	33
7 2016 High School Problems	39
8 2016 Middle School Problems	47
9 2017 High School Problems	53
10 2017 Middle School Problems	59
11 2018 High School Problems	63
12 2018 Middle School Problems	69
13 2019 High School Problems	73

14	2019 Middle School Problems	81
15	2020 High School Problems	87
16	2020 Middle School Problems	95
17	2021 High School Problems	101
18	2021 Middle School Problems	107
19	2022 High School Problems	113
20	2022 Middle School Problems	119
II Solutions		123
21	2013 High School Solutions	125
22	2013 Middle School Solutions	143
23	2014 High School Solutions	153
24	2014 Middle School Solutions	173
25	2015 High School Solutions	185
26	2015 Middle School Solutions	205
27	2016 High School Solutions	217
28	2016 Middle School Solutions	237
29	2017 High School Solutions	249
30	2017 Middle School Solutions	269
31	2018 High School Solutions	279
32	2018 Middle School Solutions	295
33	2019 High School Solutions	307
34	2019 Middle School Solutions	327
35	2020 High School Solutions	339

36 2020 Middle School Solutions	361
37 2021 High School Solutions	373
38 2021 Middle School Solutions	391
39 2022 High School Solutions	403
40 2022 Middle School Solutions	423
III Appendix	435
Translations	437
2020 High School Problem #23	437
2020 High School Problem #25	442
2020 Middle School Problem #15	446
Topics and Difficulty	451