

Hyalotekite, a complex lead borosilicate: its crystal structure and the lone-pair effect of Pb(II)

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Abstract

Hyalotekite, *ca.* $\text{Pb}_2\text{Ba}_2\text{Ca}_2[\text{B}_2(\text{Si}_{11/2}\text{Be}_{1/2})\text{Si}_8\text{O}_{28}]\text{F}$, $Z = 2$, $a = 11.310(2)$, $b = 10.955(2)$, $c = 10.317(3)\text{\AA}$, $\alpha = 90.43(2)^\circ$, $\beta = 90.02(2)^\circ$, $\gamma = 90.16(2)^\circ$, space group $I\bar{1}$ from Långban, Sweden was determined by Patterson and Fourier techniques, and refined to $R = 0.060$ for 3713 independent reflections. The calculated density of 3.829 g cm^{-3} based on the detailed chemical analysis by Lindström, is in good agreement with the observed specific gravity of 3.82.

Twenty-six independent atoms occur in the asymmetric unit. Two sets: Pb(1), Ba(1); and Pb(2), Ba(2) are associated spatially in pairs. Pb^{2+} and Ba^{2+} are separated by *ca.* 0.5\AA , a possible segregation from the parent $I2/m$ structure due to the $6s^2$ lone-pair effect on Pb^{2+} . The structure has three principal linked components: ${}^0_2[\text{Si}_4\text{O}_{12}]$ four-membered rings, ${}^0_2[\text{B}_2(\text{Si}_{3/2}\text{Be}_{1/2})\text{O}_{12}]$ four-membered rings and $[\text{Ca}_2\text{Pb}_4\text{O}_{26}\text{F}]$ clusters. The tetrahedra link to form an incomplete framework of composition $\frac{3}{2}[\text{T}_6\text{O}_{14}]$ ($4\text{T}_6 = \text{BeB}_4\text{Si}_{19}$ in the unit cell) which remotely resembles that of the feldspars.

Mean polyhedral distances are ${}^{18}\text{Pb}(1)\text{-O} = 2.804$, ${}^{19}\text{Ba}(1)\text{-O} = 2.929$, ${}^{18}\text{Pb}(2)\text{-O} = 2.804$, ${}^{19}\text{Ba}(2)\text{-O} = 2.937$, ${}^{18}\text{Ca}\text{-O} = 2.437$, ${}^{14}\text{Si}(1) (= \text{Si}_{3/4}\text{Be}_{1/4})\text{-O} = 1.597$, ${}^{14}\text{Si}(2)\text{-O} = 1.611$, ${}^{14}\text{Si}(3)\text{-O} = 1.613$, ${}^{14}\text{Si}(4)\text{-O} = 1.610$, ${}^{14}\text{Si}(5)\text{-O} = 1.613$ and ${}^{14}\text{B}\text{-O} = 1.496\text{\AA}$. The F^- anion at the origin bonds to four $(\text{Pb}, \text{Ba})^{2+}$ and two Ca^{2+} .

The hyalotekite structure has a remote structural kinship with that of gillespite, $\text{BaFeSi}_4\text{O}_{10}$.

Introduction

Hyalotekite is a rare mineral species, first named by Nordenskiöld (1877). It was subsequently studied in more chemical detail by Lindström (1887), but since then neither structure type, space group nor cell parameters have been reported. Nordenskiöld named it from the Greek *hyalos* and *tektos* owing to its property of forming a clear, colorless glass upon heating.

We expressed a special interest in hyalotekite for several reasons. First, the relatively large blocky masses from the only reported locality, Långbanshyttan, Sweden, much resemble feldspars. Second, an analysis which expressed the presence of major Pb^{2+} , Ba^{2+} , Ca^{2+} , K^{1+} , Be^{2+} , B^{3+} , Si^{4+} , O^{2-}

and F^- suggested an unusual crystal-chemical problem. The senior author was attracted to the species because of its relatively high content of Pb^{2+} , and the lone-pair effect expected for this cation in an oxide environment. In addition, its curious property of easily melting to a glass attracted our attention.

The refined crystal structure demonstrated that no simple end-member formula could be written for the compound and what we suggest for such a formula is a mere approximation. Furthermore, Lindström's analysis is demonstrated to be a rather good chemical description of the species, and it appears that all subsequent chemical approximations in the literature were erroneous in some ways.

K	L	FO	FC	H	K	L	FO	FC	H	K	L	FO	FC	H	K	L	FO	FC	H	K	L	FO	FC
0	2	206.7	217.1	0	4	-6	103.1	106.0	0	8	-4	156.7	159.3	0	13	1	104.8	106.4	0	13	1	104.8	106.4
0	4	527.0	530.0	0	4	-4	22.3	15.4	0	8	-2	230.2	240.7	0	13	3	94.0	95.8	0	13	3	94.0	95.8
0	6	202.1	206.2	0	4	-2	148.0	145.6	0	8	0	172.7	174.2	0	13	5	58.6	57.5	0	13	5	58.6	57.5
0	8	368.2	358.3	0	4	0	106.9	112.0	0	8	2	263.5	266.5	0	13	7	90.7	92.9	0	13	7	90.7	92.9
0	10	181.3	177.7	0	4	2	38.3	38.4	0	8	4	127.8	132.3	0	13	-6	52.3	56.2	0	13	-6	52.3	56.2
0	12	221.3	214.2	0	4	4	147.0	149.4	0	8	6	164.3	157.0	0	14	-4	91.0	98.1	0	14	-4	91.0	98.1
0	14	114.7	107.5	0	4	6	73.1	74.3	0	8	8	83.2	87.0	0	14	-2	78.9	82.2	0	14	-2	78.9	82.2
0	16	185.8	185.2	0	4	8	153.1	151.8	0	8	10	148.9	151.2	0	14	0	37.4	43.7	0	14	0	37.4	43.7
0	18	82.7	83.0	0	4	10	25.6	20.8	0	8	12	43.4	45.4	0	14	2	39.3	39.3	0	14	2	39.3	39.3
0	20	180.5	180.9	0	4	12	94.2	94.4	0	8	14	102.1	109.3	0	14	4	75.4	78.3	0	14	4	75.4	78.3
0	22	194.3	198.6	0	4	14	108.1	99.3	0	8	16	135.8	139.2	0	14	6	16.6	9.9	0	14	6	16.6	9.9
0	24	396.0	388.1	0	4	16	95.9	91.8	0	8	18	128.0	130.7	0	14	8	14.0	40.6	0	14	8	14.0	40.6
0	26	132.2	138.1	0	4	18	70.5	67.3	0	8	20	185.7	192.7	0	14	10	41.1	42.3	0	14	10	41.1	42.3
0	28	125.1	127.8	0	4	20	98.0	96.7	0	8	22	133.0	136.7	0	14	12	44.1	44.1	0	14	12	44.1	44.1
0	30	125.6	136.7	0	4	22	155.0	154.3	0	8	24	189.0	190.5	0	14	14	55.2	59.9	0	14	14	55.2	59.9
0	32	25.5	15.9	0	4	24	164.6	161.6	0	8	26	42.9	32.4	0	15	-2	57.6	60.9	0	15	-2	57.6	60.9
0	34	94.0	93.4	0	4	26	199.3	201.8	0	8	28	210.2	218.1	0	15	0	15.4	23.1	0	15	0	15.4	23.1
0	36	10.2	13.2	0	4	28	330.3	327.7	0	8	30	86.9	90.6	0	15	2	56.3	59.0	0	15	2	56.3	59.0
0	38	44.6	46.1	0	4	30	477.7	473.6	0	8	32	29.4	11.4	0	15	4	59.1	62.8	0	15	4	59.1	62.8
0	40	37.1	36.8	0	4	32	125.2	127.6	0	8	34	84.4	87.0	0	15	6	59.1	40.4	0	15	6	59.1	40.4
0	42	46.6	53.7	0	4	34	340.5	384.8	0	8	36	22.9	21.5	0	15	8	41.7	49.7	0	15	8	41.7	49.7
0	44	13.8	9.0	0	4	36	93.4	92.2	0	8	38	74.1	66.6	0	15	10	29.7	28.4	0	15	10	29.7	28.4
0	46	41.0	39.1	0	4	38	274.2	271.0	0	8	40	40.8	32.8	0	15	12	75.4	70.4	0	15	12	75.4	70.4
0	48	16.7	14.0	0	4	40	196.7	199.0	0	8	42	119.9	124.4	0	15	14	24.6	18.2	0	15	14	24.6	18.2
0	50	50.8	47.7	0	4	42	128.0	132.8	0	8	44	17.6	22.4	0	15	16	18.8	16.8	0	15	16	18.8	16.8
0	52	246.1	242.3	0	4	44	258.6	263.2	0	8	46	181.7	178.4	0	15	18	27.0	20.0	0	15	18	27.0	20.0
0	54	144.6	130.1	0	4	46	360.6	371.7	0	8	48	105.9	104.5	0	15	20	51.2	32.4	0	15	20	51.2	32.4
0	56	350.6	339.2	0	4	48	235.4	237.8	0	8	50	84.5	82.5	0	15	22	13.2	16.7	0	15	22	13.2	16.7
0	58	235.6	233.7	0	4	50	353.8	354.5	0	8	52	89.6	87.0	0	15	24	63.5	57.2	0	15	24	63.5	57.2
0	60	152.7	155.0	0	4	52	99.4	106.0	0	8	54	136.5	136.3	0	15	26	34.3	23.7	0	15	26	34.3	23.7
0	62	236.0	240.6	0	4	54	260.3	263.4	0	8	56	199.7	199.7	0	15	28	38.3	44.7	0	15	28	38.3	44.7
0	64	111.1	111.2	0	4	56	140.9	141.0	0	8	58	111.0	104.9	0	15	30	32.5	21.3	0	15	30	32.5	21.3
0	66	236.0	240.6	0	4	58	185.8	183.5	0	8	60	83.4	86.5	0	15	32	40.8	36.0	0	15	32	40.8	36.0
0	68	156.2	157.2	0	4	60	63.9	61.1	0	8	62	131.2	130.5	0	15	34	12.4	7.2	0	15	34	12.4	7.2
0	70	192.2	197.9	0	4	62	218.9	212.7	0	8	64	60.0	60.7	0	15	36	47.8	49.6	0	15	36	47.8	49.6
0	72	206.7	212.7	0	4	64	63.9	61.1	0	8	66	141.0	140.7	0	15	38	52.6	51.6	0	15	38	52.6	51.6
0	74	271.0	271.8	0	4	66	21.8	26.1	0	8	68	77.6	80.3	0	15	40	13.3	8.3	0	15	40	13.3	8.3
0	76	266.3	271.3	0	4	68	28.4	28.6	0	8	70	113.4	111.0	0	15	42	65.0	54.7	0	15	42	65.0	54.7
0	78	353.3	348.1	0	4	70	101.4	98.7	0	8	72	54.4	44.0	0	15	44	56.6	39.0	0	15	44	56.6	39.0
0	80	419.9	406.0	0	4	72	74.2	73.8	0	8	74	89.5	89.5	0	15	46	48.2	25.2	0	15	46	48.2	25.2
0	82	446.4	416.8	0	4	74	101.4	98.7	0	8	76	51.4	44.0	0	15	48	35.1	25.2	0	15	48	35.1	25.2
0	84	400.1	383.4	0	4	76	28.4	28.0	0	8	78	54.4	55.4	0	15	50	100.8	98.0	0	15	50	100.8	98.0
0	86	319.3	312.6	0	4	78	139.4	138.5	0	8	80	80.7	80.8	0	15	52	64.3	65.4	0	15	52	64.3	65.4
0	88	329.3	333.6	0	4	80	76.5	80.0	0	8	82	37.5	43.0	0	15	54	130.9	129.7	0	15	54	130.9	129.7
0	90	219.9	219.1	0	4	82	179.7	183.2	0	8	84	73.1	74.9	0	15	56	64.3	65.4	0	15	56	64.3	65.4
0	92	163.9	163.8	0	4	84	84.1	83.7	0	8	86	39.7	43.4	0	15	58	58.5	52.8	0	15	58	58.5	52.8
0	94	155.6	153.6	0	4	86	84.1	83.7	0	8	88	38.3	43.4	0	15	60	75.5	71.4	0	15	60	75.5	71.4
0	96	42.3	46.3	0	4	88	126.8	123.7	0	8	90	75.4	75.4	0	15	62	79.0	75.5	0	15	62	79.0	75.5
0	98	91.9	99.8	0	4	90	125.1	122.0	0	8	92	13.5	17.9	0	15	64	86.5	81.4	0	15	64	86.5	81.4
0	100	58.3	62.4	0	4	92	124.1	88.9	0	8	94	106.6	105.6	0	15	66	86.5	81.4	0	15	66	86.5	81.4
0	102	129.8	132.6	0	4	94	200.9	194.1	0	8	96	64.8	64.7	0	15	68	30.5	27.1	0	15	68	30.5	27.1
0	104	35.9	38.5	0	4	96	123.1	130.2	0	8	98	64.8	64.7	0	15	70	38.6	61.2	0	15	70	38.6	61.2

H	K	L	FD	FC	H	K	L	FD	FC	H	K	L	FD	FC	H	K	L	FD	FC	H	K	L	FD	FC
1	-10	-5	35.7	26.1	1	-6	5	150.8	142.4	1	-2	1	101.2	85.6	1	2	-7	91.8	90.8	1	2	-7	91.8	90.8
1	-10	-3	85.6	71.9	1	-6	7	64.0	58.1	1	-2	3	113.1	104.7	1	2	-5	29.6	23.1	1	2	-5	29.6	23.1
1	-10	-1	30.3	35.4	1	-6	9	116.0	108.2	1	-2	5	33.2	23.1	1	2	-3	113.1	100.6	1	2	-3	113.1	100.6
1	-10	1	112.2	102.5	1	-6	11	72.9	66.3	1	-2	7	91.9	88.5	1	2	-1	99.9	82.3	1	2	-1	99.9	82.3
1	-10	3	83.7	87.0	1	-6	13	91.6	86.1	1	-2	9	11.5	4.4	1	2	1	102.4	89.2	1	2	1	102.4	89.2
1	-10	5	96.1	87.1	1	-5	-12	85.0	81.8	1	-2	11	61.8	61.1	1	2	3	210.0	202.4	1	2	3	210.0	202.4
1	-10	7	23.0	30.8	1	-5	-10	58.9	51.9	1	-2	13	21.9	14.3	1	2	5	64.9	58.4	1	2	5	64.9	58.4
1	-10	9	40.3	21.9	1	-5	-8	127.5	128.2	1	-1	-14	25.6	24.8	1	2	7	27.4	27.4	1	2	7	27.4	27.4
1	-10	11	37.2	36.1	1	-5	-6	144.5	145.2	1	-1	-12	12.8	14.4	1	2	9	248.1	245.4	1	2	9	248.1	245.4
1	-9	-10	33.8	45.2	1	-5	-4	146.8	148.0	1	-1	-10	12.4	3.4	1	2	11	139.0	138.2	1	2	11	139.0	138.2
1	-9	-8	28.3	18.6	1	-5	-2	146.3	143.8	1	-1	-8	28.4	24.7	1	2	13	38.5	39.9	1	2	13	38.5	39.9
1	-9	-6	41.3	46.6	1	-5	0	201.8	198.1	1	-1	-6	20.5	20.1	1	3	-14	35.2	46.1	1	3	-14	35.2	46.1
1	-9	-4	20.0	26.4	1	-5	2	64.5	64.7	1	-1	-4	108.2	115.6	1	3	-12	70.2	72.8	1	3	-12	70.2	72.8
1	-9	-2	96.1	93.6	1	-5	4	104.5	105.0	1	-1	-2	148.5	166.3	1	3	-10	81.0	79.3	1	3	-10	81.0	79.3
1	-9	0	27.8	25.9	1	-5	6	193.6	188.1	1	-1	0	153.6	164.0	1	3	-8	93.7	92.6	1	3	-8	93.7	92.6
1	-9	2	72.9	73.2	1	-5	8	77.0	73.5	1	-1	2	198.0	210.9	1	3	-6	177.2	178.6	1	3	-6	177.2	178.6
1	-9	4	47.2	45.4	1	-5	10	23.9	68.2	1	-1	4	28.5	14.6	1	3	-4	71.8	62.6	1	3	-4	71.8	62.6
1	-9	6	68.1	62.4	1	-5	12	23.9	6.8	1	-1	6	153.5	154.5	1	3	-2	288.7	282.5	1	3	-2	288.7	282.5
1	-9	8	61.7	65.1	1	-4	-13	21.8	17.3	1	-1	8	78.0	80.8	1	3	0	64.9	55.2	1	3	0	64.9	55.2
1	-9	10	86.1	85.6	1	-4	-11	35.6	36.6	1	-1	10	102.3	100.4	1	3	2	256.8	252.2	1	3	2	256.8	252.2
1	-8	-11	84.8	83.4	1	-4	-9	79.3	75.5	1	-1	12	79.2	80.9	1	3	4	24.3	16.1	1	3	4	24.3	16.1
1	-8	-9	55.2	59.8	1	-4	-7	79.3	75.5	1	-1	14	67.6	67.7	1	3	6	130.2	127.9	1	3	6	130.2	127.9
1	-8	-7	103.5	104.2	1	-4	-5	10.0	5.2	1	-1	16	75.2	74.7	1	3	8	85.6	60.0	1	3	8	85.6	60.0
1	-8	-5	88.9	93.0	1	-4	-3	101.0	96.1	1	-1	18	55.7	55.6	1	3	10	59.1	52.7	1	3	10	59.1	52.7
1	-8	-3	95.7	95.9	1	-4	-1	19.5	22.3	1	-1	20	83.4	81.5	1	3	12	51.1	40.4	1	3	12	51.1	40.4
1	-8	-1	106.6	97.7	1	-4	1	64.6	65.7	1	-1	22	187.0	186.5	1	3	14	13.9	17.8	1	3	14	13.9	17.8
1	-8	1	109.4	104.0	1	-4	3	55.2	56.2	1	-1	24	192.6	195.9	1	4	-13	26.3	92.7	1	4	-13	26.3	92.7
1	-8	3	124.9	120.8	1	-4	5	10.0	9.1	1	-1	26	153.5	162.4	1	4	-11	93.6	92.7	1	4	-11	93.6	92.7
1	-8	5	71.4	73.9	1	-4	7	121.0	126.1	1	-1	28	142.5	149.4	1	4	-9	40.6	42.6	1	4	-9	40.6	42.6
1	-8	7	107.8	101.9	1	-4	9	31.3	43.8	1	-1	30	137.9	150.0	1	4	-7	122.1	124.7	1	4	-7	122.1	124.7
1	-8	9	12.5	11.6	1	-4	11	93.3	95.1	1	-1	32	150.3	161.5	1	4	-5	9.5	9.2	1	4	-5	9.5	9.2
1	-8	11	95.6	89.1	1	-4	13	13.3	20.2	1	-1	34	189.9	194.5	1	4	-3	51.6	53.1	1	4	-3	51.6	53.1
1	-7	-12	56.9	55.3	1	-3	-14	14.3	11.1	1	-1	36	181.9	185.6	1	4	-1	62.9	61.5	1	4	-1	62.9	61.5
1	-7	-10	18.7	9.3	1	-3	-12	49.9	52.0	1	-1	38	81.2	79.2	1	4	1	19.0	17.1	1	4	1	19.0	17.1
1	-7	-8	17.1	14.9	1	-3	-10	53.7	61.4	1	-1	40	58.4	52.1	1	4	3	100.8	97.9	1	4	3	100.8	97.9
1	-7	-6	40.4	37.7	1	-3	-8	86.2	87.4	1	-1	42	78.1	72.1	1	4	5	10.9	6.8	1	4	5	10.9	6.8
1	-7	-4	11.0	1.0	1	-3	-6	129.0	128.1	1	-1	44	69.4	66.2	1	4	7	78.1	74.4	1	4	7	78.1	74.4
1	-7	-2	60.8	58.8	1	-3	-4	27.6	15.9	1	-1	46	81.3	78.9	1	4	9	13.5	2.7	1	4	9	13.5	2.7
1	-7	0	48.1	51.1	1	-3	-2	259.0	252.3	1	-1	48	101.3	101.9	1	4	11	141.1	35.9	1	4	11	141.1	35.9
1	-7	2	20.4	16.3	1	-3	0	67.2	52.1	1	-1	50	78.9	80.6	1	4	13	24.5	18.1	1	4	13	24.5	18.1
1	-7	4	93.5	102.3	1	-3	2	291.4	283.5	1	-1	52	153.9	157.8	1	5	-12	19.5	8.2	1	5	-12	19.5	8.2
1	-7	6	61.8	52.7	1	-3	4	179.4	179.5	1	-1	54	26.5	13.8	1	5	-10	73.3	71.3	1	5	-10	73.3	71.3
1	-7	8	58.3	59.5	1	-3	6	92.4	90.5	1	-1	56	192.7	212.6	1	5	-8	82.1	73.8	1	5	-8	82.1	73.8
1	-7	10	12.7	15.7	1	-3	8	76.9	78.8	1	-1	58	150.0	166.7	1	5	-6	190.0	185.1	1	5	-6	190.0	185.1
1	-7	12	30.9	28.5	1	-3	10	66.9	67.9	1	-1	60	145.8	167.5	1	5	-4	104.0	100.2	1	5	-4	104.0	100.2
1	-6	-13	51.2	49.5	1	-3	12	40.6	43.5	1	-1	62	107.2	116.9	1	5	-2	62.9	62.0	1	5	-2	62.9	62.0
1	-6	-11	12.9	23.8	1	-3	14	45.9	41.3	1	-1	64	19.6	19.2	1	5	0	202.3	195.3	1	5	0	202.3	195.3
1	-6	-9	30.8	33.2	1	-3	16	140.7	139.0	1	-1	66	24.5	3.0	1	5	2	148.7	143.5	1	5	2	148.7	143.5
1	-6	-7	45.3	40.1	1	-2	-13	45.9	41.3	1	-1	68	19.6	15.9	1	5	4	150.0	143.8	1	5	4	150.0	143.8
1	-6	-5	63.8	63.6	1	-2	-11	20.9	12.6	1	-1	70	11.4	3.0	1	5	6	147.7	143.0	1	5	6	147.7	143.0
1	-6	-3	154.5	151.0	1	-2	-9	245.9	246.8	1	-1	72	18.3	15.9	1	5	8	132.1	125.7	1	5	8	132.1	125.7
1	-6	-1	97.6	100.5	1	-2	-7	66.7	59.9	1	-1	74	39.5	24.6	1	5	10	60.6	52.4	1	5	10	60.6	52.4
1	-6	1	143.0	142.0	1	-2	-5	214.1	204.4	1	-1	76	62.5	61.7	1	5	12	82.8	80.8	1	5	12	82.8	80.8
1	-6	3	50.7	54.7	1	-2	-1	106.3	92.5	1	-1	78	11.1	3.8	1	5	14	97.3	86.8	1	5	14	97.3	86.8

H	K	L	FD	FC	H	K	L	FD	FC	H	K	L	FD	FC	H	K	L	FD	FC	H	K	L	FD	FC
1	6	-11	75.2	65.8	1	11	-2	62.3	54.1	2	-12	4	12.6	16.2	2	-7	5	115.6	125.1	2	-7	5	115.6	125.1
1	6	-9	114.2	107.7	1	11	0	128.8	126.1	2	-12	6	50.5	52.0	2	-7	7	46.0	43.3	2	-7	7	46.0	43.3
1	6	-7	64.7	59.3	1	11	2	68.4	64.4	2	-12	8	16.6	18.6	2	-7	9	50.6	52.3	2	-7	9	50.6	52.3
1	6	-5	151.0	145.3	1	11	4	98.7	97.4	2	-11	-9	13.8	17.2	2	-6	11	54.4	57.9	2	-6	11	54.4	57.9
1	6	-3	65.7	57.5	1	11	6	38.4	27.8	2	-11	-7	16.6	19.8	2	-6	-12	23.5	26.5	2	-6	-12	23.5	26.5
1	6	-1	142.5	143.0	1	11	8	44.0	40.8	2	-11	-5	32.5	41.2	2	-6	-10	14.3	17.3	2	-6	-10	14.3	17.3
1	6	3	152.4	152.9	1	11	10	50.9	56.9	2	-11	-3	18.0	7.5	2	-6	-8	32.4	29.7	2	-6	-8	32.4	29.7
1	6	5	65.0	65.7	1	12	-9	65.3	59.1	2	-11	1	88.1	99.1	2	-6	-6	96.7	96.1	2	-6	-6	96.7	96.1
1	6	7	46.4	42.7	1	12	-7	13.4	8.1	2	-11	3	41.7	48.9	2	-6	-4	72.6	70.1	2	-6	-4	72.6	70.1
1	6	9	33.8	34.2	1	12	-5	52.0	51.4	2	-11	5	71.0	80.7	2	-6	-2	114.3	112.7	2	-6	-2	114.3	112.7
1	6	11	25.4	23.4	1	12	-3	44.8	48.3	2	-11	7	38.1	41.9	2	-6	0	81.2	78.0	2	-6	0	81.2	78.0
1	6	13	52.6	50.2	1	12	1	12.2	6.9	2	-11	9	86.5	95.8	2	-6	2	143.2	145.2	2	-6	2	143.2	145.2
1	6	15	20.7	27.4	1	12	3	37.2	38.5	2	-10	-10	24.0	27.5	2	-6	4	113.8	116.0	2	-6	4	113.8	116.0
1	6	17	12.7	15.2	1	12	5	42.1	45.0	2	-10	-8	69.7	71.6	2	-6	6	174.2	180.5	2	-6	6	174.2	180.5
1	6	19	53.9	57.5	1	12	7	28.0	15.5	2	-10	-6	73.7	81.4	2	-6	8	78.8	82.6	2	-6	8	78.8	82.6
1	6	21	58.8	56.2	1	12	9	19.1	23.6	2	-10	-4	75.8	79.0	2	-6	10	117.4	123.9	2	-6	10	117.4	123.9
1	6	23	93.8	100.4	1	13	-6	61.8	56.5	2	-10	-2	115.8	120.9	2	-6	-12	89.9	101.4	2	-6	-12	89.9	101.4
1	6	25	19.7	14.8	1	13	-4	13.4	17.4	2	-10	0	25.2	27.9	2	-5	-13	35.4	34.2	2	-5	-13	35.4	34.2
1	6	27	10.8	1.3	1	13	-2	47.9	44.7	2	-10	2	103.3	107.9	2	-5	-11	93.7	98.2	2	-5	-11	93.7	98.2
1	6	29	22.5	15.2	1	13	0	19.0	5.4	2	-10	4	12.0	2.9	2	-5	-9	42.6	47.8	2	-5	-9	42.6	47.8
1	6	31	58.2	56.4	1	13	2	44.9	35.7	2	-10	6	103.0	105.7	2	-5	-7	126.3	135.0	2	-5	-7	126.3	135.0
1	6	33	126.4	120.0	1	14	-5	22.3	17.7	2	-10	8	55.5	53.3	2	-5	-5	170.0	175.4	2	-5	-5	170.0	175.4
1	6	35	104.7	100.4	1	14	-3	69.8	26.7	2	-10	10	18.2	13.5	2	-5	-3	88.4	93.5	2	-5	-3	88.4	93.5
1	6	37	104.5	100.1	1	14	1	56.2	50.8	2	-10	12	12.7	5.0	2	-5	-1	121.4	134.9	2	-5	-1	121.4	134.9
1	6	39	87.1	83.6	1	14	3	44.3	40.1	2	-10	14	16.9	10.0	2	-5	1	46.0	55.7	2	-5	1	46.0	55.7
1	6	41	67.1	65.5	1	14	5	63.7	65.2	2	-10	16	56.7	52.3	2	-5	3	20.1	19.0	2	-5	3	20.1	19.0
1	6	43	66.8	64.6	1	15	-2	56.5	61.5	2	-10	18	96.7	93.8	2	-5	5	87.4	87.4	2	-5	5	87.4	87.4
1	6	45	52.1	45.9	1	15	0	32.8	22.8	2	-10	20	16.6	9.0	2	-5	7	54.7	45.5	2	-5	7	54.7	45.5
1	6	47	72.3	73.3	1	15	2	54.6	61.5	2	-10	22	44.4	38.3	2	-5	9	72.9	81.7	2	-5	9	72.9	81.7
1	6	49	29.9	30.1	2	-15	-1	13.8	7.9	2	-10	24	133.1	136.3	2	-5	11	40.7	45.9	2	-5	11	40.7	45.9
1	6	51	92.0	96.8	2	-15	1	14.0	9.3	2	-9	9	30.4	24.3	2	-5	13	94.8	98.1	2	-5	13	94.8	98.1
1	6	53	20.0	30.7	2	-14	-4	31.6	25.0	2	-9	11	30.4	24.3	2	-5	15	20.7	22.9	2	-5	15	20.7	22.9
1	6	55	44.5	48.8	2	-14	-2	14.4	36.9	2	-9	13	45.6	41.1	2	-5	17	9.7	12.0	2	-5	17	9.7	12.0
1	6	57	20.9	16.5	2	-14	0	45.6	50.7	2	-9	15	82.4	88.4	2	-5	19	20.7	22.9	2	-5	19	20.7	22.9
1	6	59	49.5	46.4	2	-14	2	13.5	12.6	2	-9	17	45.8	54.6	2	-5	21	9.0	9.6	2	-5	21	9.0	9.6
1	6	61	41.1	35.5	2	-14	4	55.2	62.0	2	-9	19	82.4	88.4	2	-5	23	66.2	68.7	2	-5	23	66.2	68.7
1	6	63	42.6	27.4	2	-13	-7	22.1	34.5	2	-9	21	77.9	82.5	2	-5	25	22.4	12.2	2	-5	25	22.4	12.2
1	6	65	23.6	31.3	2	-13	-5	19.8	13.3	2	-9	23	145.4	153.6	2	-5	27	68.1	65.8	2	-5	27	68.1	65.8
1	6	67	93.9	88.3	2	-13	-3	92.4	99.8	2	-9	25	87.5	96.6	2	-5	29	73.4	72.0	2	-5	29	73.4	72.0
1	6	69	83.5	90.7	2	-13	-1	18.1	8.2	2	-9	27	43.1	49.5	2	-5	31	91.9	94.0	2	-5	31	91.9	94.0
1	6	71	109.3	103.1	2	-13	1	104.6	112.3	2	-8	29	98.3	122.9	2	-5	33	28.7	28.8	2	-5	33	28.7	28.8
1	6	73	32.2	36.0	2	-13	3	23.8	16.2	2	-8	31	13.5	15.2	2	-5	35	36.6	36.6	2	-5	35	36.6	36.6
1	6	75	84.6	75.1	2	-13	5	100.7	105.1	2	-8	33	76.1	83.5	2	-5	37	111.9	107.0	2	-5	37	111.9	107.0
1	6	77	28.0	25.0	2	-13	7	13.8	6.4	2	-8	35	37.8	42.6	2	-5	39	148.3	145.6	2	-5	39	148.3	145.6
1	6	79	69.0	61.6	2	-12	-8	63.6	63.6	2	-8	37	98.7	104.9	2	-5	41	123.3	121.4	2	-5	41	123.3	121.4
1	6	81	39.0	28.2	2	-12	-6	50.3	47.0	2	-8	39	54.2	60.4	2	-5	43	272.5	274.9	2	-5	43	272.5	274.9
1	6	83	81.9	78.3	2	-12	-4	76.4	81.5	2	-8	41	209.2	228.0	2	-5	45	144.8	150.2	2	-5	45	144.8	150.2
1	6	85	52.3	46.0	2	-12	-2	49.9	51.7	2	-8	43	59.5	56.8	2	-5	47	336.5	346.7	2	-5	47	336.5	346.7
1	6	87	77.3	73.5	2	-12	0	24.1	22.2	2	-8	45	92.6	104.7	2	-5	49	280.5	288.4	2	-5	49	280.5	288.4
1	6	89	76.8	71.7	2	-12	2	20.0	19.8	2	-8	47	10.7	15.6	2	-5	51	220.8	231.6	2	-5	51	220.8	231.6

H	K	L	FO	FC	H	K	L	FO	FC	H	K	L	FO	FC	H	K	L	FO	FC	H	K	L	FO	FC
2	-3	7	112.6	119.0	2	1	-1	35.9	17.3	2	5	-5	42.3	49.0	2	2	9	52.8	56.3	2	2	1	52.8	56.3
2	-3	9	188.7	197.5	2	1	1	64.5	49.7	2	5	-3	122.7	129.6	2	2	9	54.1	51.8	2	2	3	54.1	51.8
2	-3	11	115.1	119.5	2	1	3	53.6	43.9	2	5	-1	87.3	91.3	2	2	9	51.7	30.3	2	2	5	51.7	30.3
2	-3	13	74.1	77.6	2	1	5	20.9	13.7	2	5	1	170.6	172.5	2	2	9	12.2	9.2	2	2	7	12.2	9.2
2	-2	14	79.6	76.5	2	1	7	21.5	15.2	2	5	3	201.9	206.2	2	2	9	12.9	4.5	2	2	9	12.9	4.5
2	-2	10	70.9	67.9	2	1	9	85.9	84.2	2	5	5	64.6	70.8	2	2	9	14.2	11.1	2	2	11	14.2	11.1
2	-2	8	81.6	88.7	2	1	11	49.3	44.9	2	5	7	139.6	134.7	2	2	9	48.0	48.4	2	2	11	48.0	48.4
2	-2	6	171.8	175.4	2	2	13	25.8	20.8	2	5	9	40.9	46.9	2	2	10	12.9	3.0	2	2	11	12.9	3.0
2	-2	4	217.3	228.8	2	2	14	16.4	7.8	2	5	11	95.7	100.1	2	2	10	96.2	100.4	2	2	10	96.2	100.4
2	-2	2	253.7	274.8	2	2	10	46.5	41.8	2	5	13	35.1	33.7	2	2	10	11.7	0.7	2	2	10	11.7	0.7
2	-2	0	69.4	52.5	2	2	8	42.5	34.8	2	6	-12	95.2	99.5	2	2	10	104.0	105.3	2	2	10	104.0	105.3
2	-2	4	178.7	199.6	2	2	6	10.8	4.0	2	6	-10	120.5	121.9	2	2	10	26.1	26.7	2	2	10	26.1	26.7
2	-2	6	117.7	128.5	2	2	4	74.5	81.9	2	6	-8	83.6	83.1	2	2	10	71.7	76.3	2	2	10	71.7	76.3
2	-2	8	75.7	87.9	2	2	2	116.2	124.6	2	6	-6	175.7	179.4	2	2	10	77.7	79.1	2	2	10	77.7	79.1
2	-2	10	11.3	7.2	2	2	0	68.7	56.7	2	6	-4	142.5	146.3	2	2	10	68.1	68.6	2	2	10	68.1	68.6
2	-2	12	36.5	42.0	2	2	2	250.9	270.8	2	6	-2	142.5	146.3	2	2	10	68.1	68.6	2	2	10	68.1	68.6
2	-2	14	13.8	15.0	2	2	4	216.3	225.1	2	6	0	83.2	82.6	2	2	10	22.0	25.9	2	2	10	22.0	25.9
2	-1	13	13.8	15.0	2	2	6	172.0	175.8	2	6	2	113.2	114.2	2	2	11	28.2	23.8	2	2	11	28.2	23.8
2	-1	11	18.8	24.5	2	2	8	87.8	87.4	2	6	4	73.2	73.1	2	2	11	85.2	43.1	2	2	11	85.2	43.1
2	-1	9	84.1	87.8	2	2	10	134.6	133.4	2	6	6	99.0	100.2	2	2	11	34.8	43.1	2	2	11	34.8	43.1
2	-1	7	17.6	11.5	2	2	12	75.1	66.9	2	6	8	32.3	31.9	2	2	11	72.9	77.2	2	2	11	72.9	77.2
2	-1	5	54.5	35.8	2	2	14	79.7	76.7	2	6	10	25.3	29.0	2	2	11	47.2	49.5	2	2	11	47.2	49.5
2	-1	3	18.7	8.9	2	2	13	74.4	73.6	2	6	12	57.4	60.9	2	2	11	88.9	95.8	2	2	11	88.9	95.8
2	-1	1	40.9	12.1	2	2	11	118.8	118.1	2	6	-11	47.0	48.4	2	2	11	16.8	7.8	2	2	11	16.8	7.8
2	-1	1	66.0	45.2	2	2	9	192.8	195.1	2	6	-9	44.6	45.6	2	2	11	24.0	20.0	2	2	11	24.0	20.0
2	-1	1	109.5	96.5	2	2	7	219.1	228.3	2	6	-5	117.0	119.1	2	2	11	22.5	15.8	2	2	11	22.5	15.8
2	-1	1	178.6	178.0	2	2	5	273.9	284.7	2	6	-3	10.3	15.8	2	2	11	47.9	49.5	2	2	11	47.9	49.5
2	-1	1	27.2	24.0	2	2	3	143.2	153.3	2	6	-1	60.1	57.8	2	2	11	34.6	39.8	2	2	11	34.6	39.8
2	-1	1	142.3	145.0	2	2	1	268.1	277.2	2	6	1	218.4	221.4	2	2	12	12.7	14.0	2	2	12	12.7	14.0
2	-1	1	15.0	13.3	2	2	3	124.2	124.5	2	6	3	56.6	59.5	2	2	12	49.3	55.3	2	2	12	49.3	55.3
2	0	13	20.7	13.3	2	2	5	150.2	146.2	2	6	5	99.6	101.8	2	2	12	79.5	77.7	2	2	12	79.5	77.7
2	0	11	20.7	24.9	2	2	7	124.1	124.5	2	6	7	46.2	40.5	2	2	12	47.9	49.5	2	2	12	47.9	49.5
2	0	9	107.2	111.1	2	2	9	116.9	110.9	2	6	9	79.7	80.2	2	2	12	61.7	59.8	2	2	12	61.7	59.8
2	0	7	93.6	97.4	2	2	11	53.6	47.4	2	6	11	26.5	11.0	2	2	12	13.9	6.6	2	2	12	13.9	6.6
2	0	5	144.2	151.5	2	2	13	38.7	33.9	2	6	-12	26.5	11.0	2	2	12	100.6	100.1	2	2	12	100.6	100.1
2	0	3	201.9	204.9	2	2	13	30.5	19.5	2	6	-10	118.8	118.9	2	2	12	22.8	16.4	2	2	12	22.8	16.4
2	0	1	167.2	162.9	2	2	11	98.5	94.4	2	6	-8	54.7	46.7	2	2	12	104.7	107.8	2	2	12	104.7	107.8
2	0	1	338.5	324.1	2	2	9	73.3	73.7	2	6	-6	80.4	84.1	2	2	12	92.9	98.0	2	2	12	92.9	98.0
2	0	1	134.7	118.8	2	2	7	64.1	65.5	2	6	-4	86.7	90.8	2	2	12	104.7	107.8	2	2	12	104.7	107.8
2	0	1	176.2	169.2	2	2	5	64.1	65.5	2	6	-2	140.8	150.1	2	2	12	15.2	13.3	2	2	12	15.2	13.3
2	0	1	210.4	207.3	2	2	3	63.5	62.4	2	6	0	109.7	115.8	2	2	12	55.1	61.8	2	2	12	55.1	61.8
2	0	1	161.3	156.9	2	2	1	10.5	6.7	2	6	2	77.5	81.9	2	2	12	16.9	10.2	2	2	12	16.9	10.2
2	0	1	101.2	102.5	2	2	1	17.1	12.2	2	6	4	121.2	125.4	2	2	12	46.0	50.3	2	2	12	46.0	50.3
2	0	1	120.4	115.8	2	2	3	14.9	9.7	2	6	6	50.3	52.5	2	2	12	16.0	23.3	2	2	12	16.0	23.3
2	0	1	33.9	27.3	2	2	5	95.5	96.8	2	6	8	84.1	85.1	2	2	12	34.5	34.2	2	2	12	34.5	34.2
2	0	1	13.8	14.1	2	2	7	108.0	113.5	2	6	10	47.4	40.9	2	2	12	14.0	6.4	2	2	12	14.0	6.4
2	0	1	140.3	143.9	2	2	9	35.0	43.5	2	6	12	33.8	29.5	2	2	12	19.5	10.8	2	2	12	19.5	10.8
2	0	1	28.5	27.0	2	2	11	79.3	79.4	2	6	-11	25.9	26.4	2	2	12	14.2	10.2	2	2	12	14.2	10.2
2	0	1	178.8	177.3	2	2	13	55.1	48.2	2	6	-9	133.9	134.1	2	2	12	19.8	24.0	2	2	12	19.8	24.0
2	0	1	50.6	44.5	2	2	15	92.3	94.8	2	6	-7	38.9	41.0	2	2	12	13.9	13.7	2	2	12	13.9	13.7
2	0	1	107.4	98.7	2	2	17	11.7	11.2	2	6	-5	125.9	127.6	2	2	12	19.5	9.9	2	2	12	19.5	9.9
2	0	1	107.4	98.7	2	2	19	175.2	184.8	2	6	-3	90.4	93.7	2	2	12	85.4	86.6	2	2	12	85.4	86.6

H	K	L	FO	FC	H	K	L	FO	FC	H	K	L	FO	FC	H	K	L	FO	FC	H	K	L	FO	FC
4	12	6	89.1	92.4	5	-9	-4	45.7	42.9	5	-5	8	73.5	63.0	5	-1	12	61.7	59.2	5	0	12	61.7	59.2
4	12	8	13.8	6.7	5	-9	-2	23.8	20.5	5	-5	10	101.6	92.5	5	0	-13	56.1	59.9	5	0	-13	56.1	59.9
4	13	-7	41.9	41.6	5	-9	0	43.2	39.7	5	-5	12	49.4	44.9	5	0	-11	80.0	78.6	5	0	-11	80.0	78.6
4	13	-5	30.5	29.5	5	-9	2	73.7	77.8	5	-4	-13	55.7	48.4	5	0	-9	52.8	48.2	5	0	-9	52.8	48.2
4	13	-1	13.2	4.0	5	-9	4	17.5	4.1	5	-4	-11	43.4	35.1	5	0	-7	137.4	136.8	5	0	-7	137.4	136.8
4	13	3	13.7	23.5	5	-9	6	38.9	37.7	5	-4	-9	32.3	23.9	5	0	-5	145.2	146.4	5	0	-5	145.2	146.4
4	13	5	32.3	26.6	5	-9	8	35.1	30.4	5	-4	-7	166.2	161.7	5	0	-3	105.1	107.0	5	0	-3	105.1	107.0
4	13	-4	52.9	51.4	5	-8	10	56.9	56.4	5	-4	-3	35.1	22.7	5	0	-1	268.7	262.4	5	0	-1	268.7	262.4
4	14	-2	41.0	41.7	5	-8	-11	33.2	28.8	5	-4	-3	65.8	60.5	5	0	0	264.9	266.8	5	0	0	264.9	266.8
4	14	0	91.7	88.2	5	-8	-9	57.5	60.6	5	-4	-1	52.0	56.8	5	0	3	105.0	107.4	5	0	3	105.0	107.4
4	14	2	47.6	47.5	5	-8	-7	71.1	68.1	5	-4	1	91.9	84.8	5	0	5	157.1	154.6	5	0	5	157.1	154.6
4	14	4	43.5	42.6	5	-8	-5	103.6	98.6	5	-4	3	114.5	117.6	5	0	7	147.5	142.9	5	0	7	147.5	142.9
5	-14	-3	13.9	17.2	5	-8	-3	159.7	156.3	5	-4	5	32.4	22.3	5	0	9	60.6	55.4	5	0	9	60.6	55.4
5	-14	-1	38.3	34.8	5	-8	-1	108.3	101.9	5	-4	7	107.6	109.4	5	0	11	91.4	83.8	5	0	11	91.4	83.8
5	-14	-1	13.8	18.3	5	-8	3	157.0	148.4	5	-4	9	12.1	16.1	5	0	13	71.1	67.2	5	0	13	71.1	67.2
5	-14	3	100.8	99.2	5	-8	5	58.5	48.1	5	-4	11	131.9	128.3	5	0	15	127.0	122.4	5	0	15	127.0	122.4
5	-13	-6	28.1	24.1	5	-8	7	172.6	164.5	5	-3	-10	18.3	16.2	5	0	-8	99.5	95.8	5	0	-8	99.5	95.8
5	-13	-4	85.7	82.5	5	-8	9	49.5	46.0	5	-3	-8	12.3	3.3	5	0	-6	228.0	225.4	5	0	-6	228.0	225.4
5	-13	0	19.5	5.0	5	-7	11	140.9	135.9	5	-3	-6	67.5	69.7	5	0	-4	135.4	131.9	5	0	-4	135.4	131.9
5	-13	2	77.2	67.5	5	-7	-10	77.2	77.6	5	-3	-6	42.9	46.1	5	0	-2	103.8	102.1	5	0	-2	103.8	102.1
5	-13	4	13.8	11.9	5	-7	-8	95.9	91.2	5	-3	-2	130.2	131.3	5	0	0	155.8	152.0	5	0	0	155.8	152.0
5	-13	6	84.6	79.1	5	-7	-6	70.7	67.7	5	-3	4	69.8	62.6	5	0	6	122.4	118.4	5	0	6	122.4	118.4
5	-12	-5	61.5	57.4	5	-7	-4	61.7	52.7	5	-3	2	175.3	177.1	5	0	8	33.5	27.4	5	0	8	33.5	27.4
5	-12	-3	23.2	15.1	5	-7	-2	24.0	33.6	5	-3	0	132.2	127.1	5	0	10	24.5	12.6	5	0	10	24.5	12.6
5	-12	-1	56.2	49.4	5	-7	0	82.0	74.2	5	-3	8	110.5	112.1	5	0	12	18.7	16.3	5	0	12	18.7	16.3
5	-12	1	8.0	17.1	5	-7	6	38.9	42.4	5	-3	10	121.4	117.8	5	0	14	54.1	53.0	5	0	14	54.1	53.0
5	-12	3	53.9	52.0	5	-7	8	12.9	9.2	5	-2	-13	88.7	85.1	5	0	-11	48.0	42.1	5	0	-11	48.0	42.1
5	-12	5	9.2	5.6	5	-7	10	46.4	45.5	5	-2	-11	47.5	50.7	5	0	-9	48.5	48.4	5	0	-9	48.5	48.4
5	-12	7	40.3	38.9	5	-7	12	36.1	27.5	5	-2	-11	148.4	145.9	5	0	-7	54.8	47.5	5	0	-7	54.8	47.5
5	-11	-8	50.3	49.1	5	-6	-11	39.3	38.3	5	-2	-7	209.5	209.2	5	0	-5	125.7	127.6	5	0	-5	125.7	127.6
5	-11	-6	8.2	4.4	5	-6	-9	17.8	1.4	5	-2	-5	163.5	162.6	5	0	-3	40.9	45.1	5	0	-3	40.9	45.1
5	-11	-4	81.2	81.1	5	-6	-7	18.9	7.8	5	-2	-3	175.7	168.9	5	0	-1	209.9	212.7	5	0	-1	209.9	212.7
5	-11	-2	28.9	16.9	5	-6	-5	40.4	42.7	5	-2	-1	112.5	107.0	5	0	1	92.2	93.3	5	0	1	92.2	93.3
5	-11	0	115.9	104.3	5	-6	-3	58.8	60.4	5	-2	-1	126.2	117.4	5	0	3	161.6	164.6	5	0	3	161.6	164.6
5	-11	2	41.7	37.1	5	-6	-1	33.7	29.0	5	-2	3	238.0	230.5	5	0	5	202.6	209.0	5	0	5	202.6	209.0
5	-11	4	110.5	107.3	5	-6	1	142.3	140.2	5	-2	5	67.0	60.2	5	0	7	96.1	98.7	5	0	7	96.1	98.7
5	-11	6	90.6	81.7	5	-6	3	26.6	8.4	5	-2	7	146.4	143.2	5	0	9	146.0	145.4	5	0	9	146.0	145.4
5	-11	8	96.3	84.5	5	-6	5	213.0	209.1	5	-2	9	36.0	38.3	5	0	11	46.7	49.5	5	0	11	46.7	49.5
5	-10	-9	13.8	2.6	5	-6	7	64.5	58.5	5	-2	9	57.9	59.2	5	0	13	46.7	49.5	5	0	13	46.7	49.5
5	-10	-7	118.8	111.0	5	-6	9	109.1	102.5	5	-2	11	34.2	31.0	5	0	15	76.7	78.2	5	0	15	76.7	78.2
5	-10	-5	16.6	11.3	5	-6	11	50.7	43.1	5	-2	13	67.3	61.8	5	0	17	112.1	112.4	5	0	17	112.1	112.4
5	-10	-3	136.0	129.4	5	-6	13	79.0	77.8	5	-2	15	13.2	2.4	5	0	19	100.9	105.2	5	0	19	100.9	105.2
5	-10	-1	26.3	18.4	5	-6	15	93.8	88.5	5	-2	17	102.1	104.1	5	0	21	168.8	169.6	5	0	21	168.8	169.6
5	-10	1	168.8	157.6	5	-5	-10	112.5	104.2	5	-1	-6	102.1	104.1	5	0	-8	64.1	61.9	5	0	-8	64.1	61.9
5	-10	3	27.7	38.7	5	-5	-8	151.1	145.5	5	-1	-4	15.7	14.7	5	0	-6	172.0	174.2	5	0	-6	172.0	174.2
5	-10	5	124.0	116.9	5	-5	-6	113.5	111.5	5	-1	-2	39.6	47.9	5	0	-4	137.8	135.6	5	0	-4	137.8	135.6
5	-10	7	12.8	25.0	5	-5	-4	113.5	111.5	5	-1	0	81.6	91.7	5	0	2	138.4	138.6	5	0	2	138.4	138.6
5	-10	9	61.2	57.8	5	-5	-2	256.1	256.5	5	-1	2	115.4	121.1	5	0	4	153.5	153.6	5	0	4	153.5	153.6
5	-9	-10	13.8	17.6	5	-5	0	211.3	204.7	5	-1	4	214.8	220.5	5	0	6	53.9	54.6	5	0	6	53.9	54.6
5	-9	-8	83.4	80.9	5	-5	2	248.0	237.0	5	-1	6	84.0	85.7	5	0	8	76.6	77.2	5	0	8	76.6	77.2
5	-9	-6	48.9	40.5	5	-5	4	245.8	235.4	5	-1	8	127.1	121.5	5	0	10	12.3	5.4	5	0	10	12.3	5.4

H	K	L	FO	FC	H	K	L	FO	FC	H	K	L	FO	FC	H	K	L	FO	FC
5	3	12	17.3	22.7	5	8	-9	38.8	38.7	5	13	4	13.8	19.3	6	-8	0	98.1	99.5
5	4	-13	24.7	17.0	5	8	-7	148.6	147.9	6	13	4	24.4	22.0	6	-8	2	122.7	122.6
5	4	-11	129.1	130.5	5	8	-5	44.5	41.1	6	14	-3	96.2	99.2	6	-8	4	120.8	122.7
5	4	-9	24.5	24.5	5	8	-3	131.2	136.6	6	14	-1	13.9	14.8	6	-8	6	95.3	95.9
5	4	-7	118.2	117.0	5	8	-1	115.0	114.7	6	14	1	35.5	37.3	6	-8	8	91.4	94.3
5	4	-5	19.2	10.5	5	8	1	98.7	99.2	6	14	3	13.9	11.4	6	-8	10	14.2	19.5
5	4	-3	131.0	128.7	5	8	3	153.5	153.3	6	14	-2	64.4	59.7	6	-8	10	14.2	19.5
5	4	-1	64.0	66.2	5	8	5	92.7	94.3	6	14	0	47.5	47.7	6	-8	-11	64.0	65.7
5	4	1	77.5	72.9	5	8	7	69.6	69.3	6	14	2	65.2	65.2	6	-8	-9	45.9	49.1
5	4	3	41.7	43.3	5	8	9	56.4	62.4	6	13	-5	42.2	39.9	6	-8	-7	46.7	49.1
5	4	5	15.3	9.7	5	8	11	33.7	31.0	6	13	-3	33.9	39.8	6	-8	-5	55.6	51.0
5	4	7	146.5	146.5	5	9	-10	55.8	55.0	6	13	-1	35.1	35.8	6	-8	-3	16.8	10.4
5	4	9	14.8	13.1	5	9	-8	34.4	34.7	6	13	3	24.8	29.7	6	-8	-1	88.6	82.6
5	4	11	27.0	25.4	5	9	-6	42.9	41.4	6	13	5	81.9	80.6	6	-8	1	41.0	40.4
5	4	13	52.0	40.4	5	9	-4	21.8	10.2	6	13	3	14.0	3.1	6	-8	3	11.2	13.5
5	4	-12	32.8	35.0	5	9	-2	76.6	81.2	6	12	-6	25.7	20.4	6	-8	-7	46.0	49.0
5	4	-10	85.3	81.7	5	9	0	36.9	29.7	6	12	-4	89.7	83.4	6	-8	-5	27.2	23.1
5	4	-8	54.1	51.7	5	9	2	29.0	30.2	6	12	0	85.4	76.6	6	-8	-3	18.3	19.4
5	4	-6	224.6	221.2	5	9	4	35.3	31.1	6	12	2	75.8	75.9	6	-8	-10	70.5	72.8
5	4	-4	23.4	21.9	5	9	6	36.3	31.1	6	12	2	95.4	89.9	6	-8	-8	133.8	132.7
5	4	-2	192.0	190.9	5	9	8	27.3	25.0	6	12	4	83.2	84.1	6	-8	-6	66.2	72.4
5	4	0	250.1	248.1	5	9	10	41.9	41.6	6	11	-7	36.7	34.2	6	-8	-4	171.0	176.3
5	4	2	103.3	104.7	5	10	-7	29.9	29.2	6	11	-5	109.8	110.4	6	-8	-2	138.6	140.1
5	4	4	141.1	141.7	5	10	-5	102.2	100.5	6	11	-3	65.0	65.9	6	-8	0	296.4	301.1
5	4	6	105.2	101.2	5	10	-3	48.0	48.7	6	11	-1	115.2	115.6	6	-8	2	121.1	120.6
5	4	8	81.5	77.8	5	10	-1	138.6	138.8	6	11	1	71.2	71.2	6	-8	4	227.9	228.6
5	4	10	90.5	87.8	5	10	1	16.5	11.8	6	11	3	90.9	95.4	6	-8	6	101.5	100.7
5	4	12	40.5	39.5	5	10	3	121.9	117.3	6	11	5	72.7	66.5	6	-8	8	202.8	201.7
5	4	-11	40.5	39.5	5	10	5	100.0	101.9	6	11	7	67.8	66.9	6	-8	10	105.5	100.7
5	4	-9	99.8	98.2	5	10	7	12.5	18.3	6	11	9	44.7	44.6	6	-8	12	128.5	130.6
5	4	-7	63.6	58.8	5	10	9	80.3	76.9	6	10	-6	66.8	66.9	6	-8	11	40.6	39.3
5	4	-5	204.9	204.8	5	10	11	13.8	4.7	6	10	-8	42.6	44.6	6	-8	10	105.5	100.7
5	4	-3	12.7	4.8	5	10	13	8.0	4.7	6	10	-6	66.8	66.9	6	-8	10	105.5	100.7
5	4	-1	140.2	140.2	5	10	15	81.1	75.8	6	10	-4	44.7	49.2	6	-8	10	105.5	100.7
5	4	1	17.0	14.8	5	10	17	106.0	103.1	6	10	2	15.2	21.0	6	-8	10	105.5	100.7
5	4	3	65.3	62.4	5	10	19	41.7	35.5	6	10	0	83.2	78.3	6	-8	10	105.5	100.7
5	4	5	55.9	54.0	5	10	21	104.1	103.7	6	10	2	11.9	8.4	6	-8	10	105.5	100.7
5	4	7	12.5	13.3	5	10	23	24.7	19.8	6	10	4	25.7	60.7	6	-8	10	105.5	100.7
5	4	9	15.6	7.3	5	10	25	78.6	79.4	6	10	6	34.5	5.8	6	-8	10	105.5	100.7
5	4	11	31.3	31.8	5	10	27	13.2	4.3	6	10	8	16.1	28.4	6	-8	10	105.5	100.7
5	4	-12	39.3	34.8	5	10	29	54.4	49.7	6	10	10	108.8	115.3	6	-8	10	105.5	100.7
5	4	-10	53.2	51.5	5	10	31	35.4	30.3	6	10	12	47.6	47.8	6	-8	10	105.5	100.7
5	4	-8	14.0	18.1	5	10	33	13.3	10.9	6	10	14	139.2	145.6	6	-8	10	105.5	100.7
5	4	-6	33.6	29.9	5	10	35	45.0	41.7	6	10	16	53.8	51.2	6	-8	10	105.5	100.7
5	4	-4	11.1	10.0	5	10	37	12.7	7.6	6	10	18	114.8	118.1	6	-8	10	105.5	100.7
5	4	-2	57.6	57.0	5	10	39	41.7	37.1	6	10	20	129.7	130.8	6	-8	10	105.5	100.7
5	4	0	49.6	49.3	5	10	41	15.5	9.3	6	10	22	107.6	110.2	6	-8	10	105.5	100.7
5	4	2	61.1	61.2	5	10	43	52.6	47.8	6	10	24	109.9	107.8	6	-8	10	105.5	100.7
5	4	4	42.8	43.2	5	10	45	53.1	45.2	6	10	26	102.5	103.0	6	-8	10	105.5	100.7
5	4	6	56.4	58.1	5	10	47	68.6	67.7	6	10	28	106.7	112.8	6	-8	10	105.5	100.7
5	4	8	79.0	82.7	5	10	49	23.0	19.7	6	10	30	51.3	55.3	6	-8	10	105.5	100.7
5	4	10	13.4	10.8	5	10	51	57.4	59.7	6	10	32	123.0	127.9	6	-8	10	105.5	100.7
5	4	12	69.1	71.1	5	10	53	13.5	7.8	6	10	34	76.7	78.0	6	-8	10	105.5	100.7
5	4	-11	126.2	125.2	5	10	55	73.6	76.1	6	10	36	142.0	143.0	6	-8	10	105.5	100.7

H	K	L	FO	FC	H	K	L	FO	FC	H	K	L	FO	FC	H	K	L	FO	FC	
6	-4	10	55.2	63.9	6	0	12	129.6	127.9	6	4	12	58.6	55.3	6	9	9	1	55.2	58.4
6	-4	12	53.7	56.6	6	1	-13	145.6	139.1	6	5	-11	27.4	16.0	6	9	9	3	151.5	154.7
6	-3	-13	59.4	65.7	6	1	-11	62.8	54.2	6	5	-9	52.7	52.5	6	9	9	5	151.5	154.6
6	-3	-11	133.4	138.2	6	1	-9	140.3	138.5	6	5	-7	59.0	54.0	6	9	9	7	119.1	125.1
6	-3	-7	103.9	110.4	6	1	-7	78.0	77.7	6	5	-5	110.8	110.8	6	9	9	9	119.1	125.1
6	-3	-5	147.5	154.6	6	1	-3	134.2	132.5	6	5	-3	133.9	132.5	6	9	9	9	129.2	22.9
6	-3	-3	157.3	160.8	6	1	-1	78.5	74.8	6	5	-1	90.9	90.9	6	10	10	-6	20.2	21.3
6	-3	-1	207.6	213.3	6	1	-1	148.9	147.7	6	5	1	200.3	200.9	6	10	10	-6	12.7	13.6
6	-3	-1	214.3	220.4	6	1	1	136.5	138.7	6	5	3	26.9	21.6	6	10	10	-4	53.7	49.9
6	-3	1	216.3	219.7	6	1	3	25.7	23.2	6	5	5	234.2	237.2	6	10	10	-2	12.3	17.6
6	-3	3	225.1	229.7	6	1	5	45.0	44.2	6	5	7	92.3	90.7	6	10	10	0	69.4	67.5
6	-3	5	216.0	225.7	6	1	7	19.3	21.5	6	5	9	162.0	158.0	6	10	10	2	18.5	12.4
6	-3	7	172.3	178.9	6	1	9	35.1	30.8	6	5	11	44.2	37.7	6	10	10	4	45.1	39.1
6	-3	9	154.1	156.1	6	1	11	14.2	11.7	6	5	11	127.5	125.4	6	10	10	6	59.5	58.8
6	-3	13	137.1	137.4	6	1	13	13.7	7.1	6	5	11	99.7	94.9	6	10	10	8	35.2	40.0
6	-2	-10	125.3	128.3	6	2	-10	49.3	55.2	6	6	-10	203.6	198.2	6	11	11	-7	70.0	64.2
6	-2	-8	80.3	81.0	6	2	-8	23.4	30.2	6	6	-8	105.3	103.3	6	11	11	-5	70.8	66.5
6	-2	-6	151.4	153.7	6	2	-6	45.5	51.0	6	6	-6	233.2	229.1	6	11	11	-3	97.1	94.2
6	-2	-4	75.4	74.5	6	2	-4	23.4	25.6	6	6	-4	123.4	122.0	6	11	11	-1	74.4	70.0
6	-2	-2	187.6	189.6	6	2	-2	106.8	108.7	6	6	0	298.5	300.0	6	11	11	3	113.9	114.4
6	-2	0	161.3	158.3	6	2	0	144.7	145.2	6	6	2	142.1	143.4	6	11	11	5	66.6	65.5
6	-2	2	124.1	122.9	6	2	2	170.7	178.0	6	6	4	182.7	182.0	6	11	11	7	116.6	113.8
6	-2	4	38.7	35.6	6	2	4	61.0	64.1	6	6	6	84.8	82.4	6	11	11	7	43.5	38.7
6	-2	6	62.8	64.2	6	2	6	137.9	143.5	6	6	8	143.5	141.1	6	11	11	7	91.9	86.2
6	-2	8	41.2	42.2	6	2	8	74.3	78.6	6	6	10	84.4	79.7	6	11	11	-4	53.4	87.2
6	-2	10	64.3	64.9	6	2	10	123.4	122.7	6	6	10	92.2	89.9	6	11	11	-2	79.6	80.1
6	-2	12	13.3	11.2	6	2	12	65.1	64.1	6	6	12	28.9	24.4	6	11	11	0	31.8	36.9
6	-1	-13	13.8	12.5	6	3	-13	133.4	132.3	6	6	-11	32.0	25.2	6	11	11	2	89.0	89.4
6	-1	-11	27.1	21.0	6	3	-11	97.5	98.4	6	6	-9	38.3	35.1	6	11	11	4	30.4	26.3
6	-1	-9	19.1	21.9	6	3	-9	152.2	150.8	6	6	-7	53.1	55.5	6	11	11	-5	14.0	4.7
6	-1	-7	44.9	36.4	6	3	-7	168.9	172.0	6	6	-5	22.5	24.3	6	11	11	-3	66.2	67.6
6	-1	-5	27.6	31.1	6	3	-5	229.0	227.2	6	6	-3	30.4	25.6	6	11	11	-1	27.0	26.2
6	-1	-3	11.7	11.0	6	3	-3	223.6	225.1	6	6	-1	16.9	68.1	6	11	11	1	21.1	29.1
6	-1	-1	119.9	123.2	6	3	-1	216.7	223.0	6	6	1	36.2	37.5	6	11	11	3	41.2	37.8
6	-1	1	123.9	133.9	6	3	1	219.9	223.0	6	6	3	36.4	38.8	6	11	11	5	68.2	64.6
6	-1	3	56.1	59.3	6	3	3	212.5	219.0	6	6	5	41.0	42.0	6	11	11	7	68.2	64.6
6	-1	5	15.1	119.4	6	3	5	166.1	166.7	6	6	7	60.8	58.1	6	11	11	9	51.1	51.7
6	-1	7	64.2	64.0	6	3	7	160.2	166.6	6	6	9	29.1	18.1	6	11	11	11	63.2	62.5
6	-1	9	134.2	133.0	6	3	9	115.6	117.8	6	6	11	84.2	84.6	6	11	11	13	24.6	17.6
6	-1	11	54.4	48.7	6	3	11	142.5	144.8	6	6	13	92.6	91.7	6	11	11	15	24.7	26.7
6	-1	13	138.6	138.7	6	3	13	72.2	73.9	6	6	15	113.7	114.6	6	11	11	17	27.6	31.4
6	-1	15	122.1	122.9	6	3	15	58.0	59.1	6	6	17	116.1	116.7	6	11	11	19	40.5	42.8
6	0	-10	93.1	91.2	6	4	-10	66.8	71.2	6	6	-8	97.4	95.1	6	11	11	21	50.7	50.7
6	0	-8	235.6	231.4	6	4	-8	78.8	77.0	6	6	-6	113.7	116.7	6	11	11	23	129.3	133.8
6	0	-6	162.7	165.2	6	4	-6	38.2	44.2	6	6	-4	140.4	138.9	6	11	11	25	50.7	42.8
6	0	-4	337.1	332.7	6	4	-4	18.0	17.0	6	6	-2	128.2	128.2	6	11	11	27	122.5	117.5
6	0	-2	132.4	132.0	6	4	-2	155.2	152.6	6	6	0	61.7	59.9	6	11	11	29	39.1	37.5
6	0	0	440.8	442.8	6	4	0	106.6	105.7	6	6	2	112.9	112.4	6	11	11	31	136.8	131.7
6	0	2	124.7	130.7	6	4	2	75.5	75.6	6	6	4	101.7	101.0	6	11	11	33	49.5	49.9
6	0	4	329.0	335.9	6	4	4	59.9	56.1	6	6	6	104.7	108.1	6	11	11	35	41.9	36.7
6	0	6	166.0	169.8	6	4	6	47.3	49.2	6	6	8	112.3	112.9	6	11	11	37	93.6	94.2
6	0	8	242.7	239.4	6	4	8	35.0	32.0	6	6	10	123.1	130.3	6	11	11	39	57.1	52.7
6	0	10	95.5	95.6	6	4	10	12.6	12.4	6	6	12	123.7	124.6	6	11	11	41	59.8	59.6

7	-11	4	20.4	23.6	7	-5	-12	55.1	58.7	7	-1	-4	118.5	116.0	7	3	0	34.9	50.2
7	-11	6	36.6	34.0	7	-5	-10	25.6	12.0	7	-1	-2	18.6	13.5	7	3	2	182.8	185.8
7	-11	8	14.0	5.7	7	-5	-8	73.2	71.2	7	-1	0	89.6	91.8	7	3	4	42.7	31.9
7	-10	-7	30.2	28.3	7	-5	-6	22.4	16.4	7	-1	2	18.0	18.0	7	3	6	131.3	136.5
7	-10	-5	12.9	10.7	7	-5	-4	54.2	56.8	7	-1	4	33.3	32.0	7	3	8	22.2	26.9
7	-10	-3	49.8	42.8	7	-5	-2	28.4	27.5	7	-1	6	31.5	29.8	7	3	10	73.4	74.1
7	-10	-1	58.9	59.5	7	-5	0	31.2	30.6	7	-1	8	28.9	29.8	7	3	12	44.8	50.0
7	-10	1	19.5	11.7	7	-5	2	27.9	22.2	7	-1	10	12.3	6.9	7	4	-11	27.0	29.7
7	-10	3	76.1	73.2	7	-5	4	11.0	15.8	7	-1	12	17.7	21.8	7	4	-9	12.4	10.0
7	-10	5	31.5	34.5	7	-5	6	12.0	12.0	7	-1	14	57.0	50.1	7	4	-7	31.6	29.2
7	-10	7	69.8	66.3	7	-5	8	12.0	5.9	7	-1	16	47.2	43.3	7	4	-5	29.2	32.1
7	-10	9	33.7	34.3	7	-5	10	13.0	3.8	7	-1	18	27.2	30.6	7	4	-3	52.9	53.8
7	-9	-8	65.4	62.5	7	-5	12	13.9	6.7	7	-1	20	72.3	71.5	7	4	-1	30.7	27.7
7	-9	-6	114.2	115.9	7	-4	-11	37.9	39.6	7	0	-5	59.4	62.5	7	4	3	66.5	65.6
7	-9	-4	55.8	58.4	7	-4	-9	35.7	35.9	7	0	-3	71.9	75.1	7	4	5	37.5	36.8
7	-9	-2	132.9	132.1	7	-4	-7	43.1	48.7	7	0	-1	19.1	19.6	7	4	7	40.8	43.4
7	-9	0	90.5	90.9	7	-4	-5	44.7	39.1	7	0	1	67.1	20.5	7	4	9	36.7	35.1
7	-9	2	109.7	112.4	7	-4	-3	77.8	75.2	7	0	3	19.1	71.1	7	4	11	38.5	37.0
7	-9	4	55.2	56.0	7	-4	-1	29.7	29.3	7	0	5	60.7	60.1	7	4	13	14.0	13.1
7	-9	6	55.6	61.0	7	-4	1	62.4	59.5	7	0	7	30.7	37.6	7	5	-8	29.6	29.6
7	-9	8	39.2	43.7	7	-4	3	29.5	30.8	7	0	9	30.6	24.1	7	5	-6	11.6	16.3
7	-8	-9	19.8	12.2	7	-4	5	34.5	38.1	7	0	11	53.5	48.1	7	5	-4	23.3	22.0
7	-8	-7	113.5	112.1	7	-4	7	38.7	38.7	7	0	13	27.7	23.7	7	5	-2	25.5	18.0
7	-8	-5	12.0	10.0	7	-4	9	14.9	8.5	7	0	15	12.4	6.5	7	5	0	31.8	29.7
7	-8	-3	85.5	87.4	7	-3	-11	35.4	32.9	7	0	-10	32.7	30.4	7	5	2	22.0	54.6
7	-8	-1	40.9	28.1	7	-3	-10	44.2	52.6	7	0	-8	38.4	34.6	7	5	4	12.7	14.3
7	-8	1	43.0	49.6	7	-3	-8	27.1	29.5	7	0	-6	26.7	29.6	7	5	6	68.1	67.9
7	-8	3	52.1	42.4	7	-3	-6	135.5	139.9	7	0	-4	16.6	11.5	7	5	8	26.2	13.8
7	-8	5	30.0	30.7	7	-3	-4	37.7	31.6	7	0	-2	93.2	93.1	7	5	10	50.6	55.7
7	-8	7	26.7	4.9	7	-3	-2	179.4	187.4	7	0	0	28.8	28.3	7	5	12	39.8	42.3
7	-7	-8	45.0	32.3	7	-3	0	43.7	34.4	7	0	2	106.9	107.4	7	5	14	40.8	43.6
7	-7	-6	49.5	42.2	7	-3	2	105.6	99.2	7	0	4	21.1	22.8	7	5	16	45.2	43.0
7	-7	-4	29.4	18.8	7	-3	4	147.9	152.3	7	0	6	94.1	94.2	7	5	18	58.6	57.6
7	-7	-2	21.8	12.7	7	-3	6	25.5	13.9	7	0	8	33.1	31.0	7	5	20	71.3	66.3
7	-7	0	108.4	102.2	7	-3	8	42.5	46.4	7	0	10	42.6	40.6	7	5	22	99.8	97.3
7	-7	2	30.7	31.3	7	-3	10	13.8	10.3	7	0	12	27.0	22.7	7	5	24	121.2	118.7
7	-7	4	135.7	131.6	7	-2	-11	57.5	62.1	7	0	14	10.1	10.5	7	5	26	26.5	32.0
7	-7	6	27.1	26.5	7	-2	-9	76.0	69.8	7	0	16	37.5	36.3	7	5	28	26.6	60.9
7	-7	8	25.4	68.8	7	-2	-7	124.0	127.6	7	0	18	19.2	12.9	7	5	30	124.7	122.9
7	-7	10	25.6	21.5	7	-2	-5	13.7	14.8	7	0	20	43.4	39.7	7	5	32	29.4	29.8
7	-6	-11	49.3	51.4	7	-2	-3	46.6	42.1	7	0	22	37.5	36.3	7	5	34	52.0	49.9
7	-6	-9	127.0	127.2	7	-2	-1	34.4	37.7	7	0	24	71.2	66.9	7	5	36	26.6	62.1
7	-6	-7	39.1	34.4	7	-2	1	11.9	12.6	7	0	26	126.1	128.9	7	5	38	26.5	32.0
7	-6	-5	121.8	124.4	7	-2	3	16.8	13.3	7	0	28	74.8	70.7	7	5	40	124.7	122.9
7	-6	-3	100.9	104.0	7	-2	5	25.4	27.8	7	0	30	59.9	61.7	7	5	42	24.0	24.4
7	-6	-1	93.9	93.3	7	-2	7	27.6	27.7	7	0	32	13.9	12.6	7	5	44	94.0	92.1
7	-6	1	53.8	58.4	7	-2	9	31.2	34.6	7	0	34	51.4	49.4	7	5	46	11.2	9.7
7	-6	3	48.7	69.0	7	-2	11	37.2	33.2	7	0	36	23.0	10.7	7	5	48	114.8	114.0
7	-6	5	45.0	44.0	7	-1	-12	33.8	25.5	7	0	38	98.8	95.5	7	5	50	43.4	42.8
7	-6	7	38.0	37.4	7	-1	-10	100.4	98.9	7	0	40	130.3	121.1	7	5	52		
7	-6	9	31.5	35.8	7	-1	-8	11.8	22.3	7	0	42			7	5	54		

H	K	L	FO	FC	H	K	L	FO	FC	H	K	L	FO	FC	H	K	L	FO	FC
8	8	7	60.2	59.8	9	-11	0	41.1	39.0	9	-5	-4	74.3	73.4	9	0	-11	71.3	70.0
8	8	7	26.4	19.5	9	-11	-4	56.3	57.6	9	-5	-8	89.5	59.3	9	-1	10	58.6	62.6
8	8	7	139.0	135.9	9	-11	3	43.1	43.4	9	-6	9	100.5	100.5	9	-1	4	98.6	102.8
8	8	7	14.0	15.6	9	-12	1	87.4	88.0	9	-6	7	55.7	45.7	9	-1	2	45.3	51.7
8	8	7	101.3	95.3	9	-12	-1	42.1	34.3	9	-6	7	93.6	61.6	9	-1	0	48.3	49.8
8	8	7	22.0	68.2	9	-12	-3	85.4	86.1	9	-6	5	100.6	100.6	9	-1	-2	49.0	49.6
8	8	7	75.6	68.2	9	-12	8	19.1	29.5	9	-6	1	85.5	85.5	9	-1	-4	20.0	64.5
8	8	7	40.6	43.8	8	13	89.9	91.0	91.0	9	-6	-1	98.1	101.7	9	-1	-6	64.3	64.5
8	8	7	67.0	62.6	8	13	14.0	74.2	74.2	9	-6	-3	65.5	69.7	9	-1	-10	36.4	19.4
8	8	6	12.6	23.7	8	12	13.6	28.1	28.1	9	-6	-5	71.0	71.0	9	-1	11	13.9	13.9
8	8	6	27.2	29.7	8	12	30.8	33.0	33.0	9	-6	-7	87.0	89.4	9	-2	9	74.0	70.9
8	8	6	83.8	88.2	8	12	1.4	1.4	30.0	9	-7	6	104.0	106.4	9	-2	5	87.4	88.6
8	8	6	78.5	82.2	8	11	13.7	19.8	19.8	9	-7	4	50.9	50.9	9	-2	7	35.1	27.0
8	8	6	69.1	69.1	8	11	38.2	30.0	30.0	9	-7	6	106.4	106.4	9	-2	3	87.9	82.3
8	8	6	56.4	57.3	8	11	13.7	19.8	19.8	9	-7	4	50.9	50.9	9	-2	1	100.4	103.0
8	8	6	55.3	57.3	8	11	17.7	24.7	24.7	9	-7	4	66.8	66.8	9	-2	-1	103.6	102.7
8	8	6	80.6	82.0	8	11	81.0	79.0	79.0	9	-7	2	22.4	9.2	9	-2	-3	39.7	32.3
8	8	6	67.9	66.7	8	11	26.4	26.4	26.4	9	-7	0	63.3	67.4	9	-2	-5	130.6	130.2
8	8	6	80.5	77.4	8	11	13.3	4.3	4.3	9	-7	-4	15.2	10.2	9	-2	-7	13.3	10.3
8	8	6	45.4	45.4	8	11	13.3	4.3	4.3	9	-7	-4	15.2	10.2	9	-2	-9	161.4	162.3
8	8	5	12.1	3.5	8	11	58.1	59.9	59.9	9	-7	-6	34.8	33.4	9	-2	-11	26.6	22.4
8	8	5	93.8	97.8	8	11	55.1	53.9	53.9	9	-7	-8	76.0	71.6	9	-3	10	65.0	58.8
8	8	5	39.7	38.3	8	10	71.4	69.3	69.3	9	-8	7	48.0	48.0	9	-3	6	104.0	106.8
8	8	5	77.5	75.0	8	10	40.4	37.2	37.2	9	-8	5	73.0	64.2	9	-3	4	144.7	146.6
8	8	5	63.8	62.0	8	10	71.6	68.5	68.5	9	-8	7	70.6	68.2	9	-3	4	47.0	43.0
8	8	5	10.9	12.0	8	10	20.4	15.2	15.2	9	-8	1	58.9	55.3	9	-3	0	20.9	15.0
8	8	5	95.1	96.1	8	10	93.3	94.3	94.3	9	-8	1	103.4	98.8	9	-3	2	158.7	163.8
8	8	5	11.8	11.0	8	10	12.7	11.3	11.3	9	-8	-1	58.9	55.3	9	-3	0	45.9	40.7
8	8	5	98.6	99.6	8	10	12.7	11.3	11.3	9	-8	-1	58.9	55.3	9	-3	2	158.7	163.8
8	8	5	35.1	35.5	8	10	77.7	76.7	76.7	9	-8	-3	92.0	86.5	9	-3	-4	178.6	180.8
8	8	5	62.2	64.0	8	10	24.6	20.6	20.6	9	-8	-5	110.5	108.1	9	-3	-6	54.8	52.0
8	8	4	30.4	31.3	8	10	19.0	4.8	4.8	9	-8	-7	56.1	86.6	9	-3	-8	76.4	74.2
8	8	4	68.2	69.1	8	9	17.3	11.4	11.4	9	-8	-9	90.0	86.6	9	-3	-6	54.8	52.0
8	8	4	39.6	35.6	8	9	12.3	18.7	18.7	9	-9	8	56.7	54.1	9	-3	-10	55.8	52.6
8	8	4	38.5	35.6	8	9	12.3	18.7	18.7	9	-9	8	56.7	54.1	9	-3	-10	55.8	52.6
8	8	4	32.7	32.7	8	9	30.0	27.9	27.9	9	-9	4	83.5	79.6	9	-4	9	32.9	25.6
8	8	4	25.3	15.4	8	9	62.8	64.8	64.8	9	-9	2	103.9	104.0	9	-4	5	68.6	74.9
8	8	4	52.8	52.7	8	9	12.2	7.3	7.3	9	-9	-2	45.3	36.0	9	-4	3	66.4	67.8
8	8	4	18.8	13.7	8	9	73.2	73.0	73.0	9	-9	-4	75.9	74.2	9	-4	1	98.1	97.8
8	8	4	13.9	31.5	8	9	13.1	0.7	0.7	9	-9	-6	43.5	40.9	9	-4	-3	64.5	65.0
8	8	4	21.9	23.3	8	9	104.0	104.3	104.3	9	-9	-6	43.5	40.9	9	-4	-3	64.5	65.0
8	8	4	24.9	23.3	8	9	14.0	5.2	5.2	9	-9	-8	83.8	84.3	9	-4	-1	14.1	10.5
8	8	3	61.5	60.0	8	8	14.0	5.2	5.2	9	-9	-8	83.8	84.3	9	-4	-1	14.1	10.5
8	8	3	23.7	11.3	8	8	38.2	28.7	28.7	9	-10	7	88.8	84.3	9	-4	-3	33.9	37.4
8	8	3	47.9	40.0	8	8	14.2	18.7	18.7	9	-10	5	85.5	83.2	9	-4	-7	59.9	57.3
8	8	3	61.0	57.6	8	8	71.4	70.6	70.6	9	-10	3	35.1	40.8	9	-4	-9	20.5	17.0
8	8	3	83.3	83.6	8	8	30.9	21.5	21.5	9	-10	1	70.0	70.9	9	-4	-11	25.2	26.6
8	8	3	44.4	38.5	8	8	41.8	36.0	36.0	9	-10	-1	28.5	22.2	9	-5	10	25.2	26.6
8	8	3	193.5	198.8	8	8	57.0	57.1	57.1	9	-10	-3	31.4	39.4	9	-5	8	41.1	36.0
8	8	3	68.8	66.0	8	8	55.2	53.9	53.9	9	-10	-5	13.6	13.8	9	-5	6	16.0	11.2
8	8	3	161.3	164.6	8	8	51.0	47.6	47.6	9	-10	-7	13.7	13.8	9	-5	4	77.9	78.9
8	8	3	117.2	119.2	8	8	13.1	3.0	3.0	9	-11	6	50.6	45.9	9	-5	2	107.0	113.5
8	8	3	144.7	145.7	8	8	65.6	59.7	59.7	9	-11	4	56.1	61.0	9	-5	0	54.9	54.7
8	8	3	66.5	67.0	8	8	35.7	31.6	31.6	9	-11	2	72.8	73.2	9	-5	-2	87.3	92.0

H	K	L	FO	FC	H	K	L	FO	FC	H	K	L	FO	FC	H	K	L	FO	FC	H	K	L	FO	FC
9	0	-9	69.5	72.1	9	4	7	74.2	74.4	9	10	-5	85.8	83.3	10	-7	5	54.0	57.2	9	0	-9	69.5	72.1
9	0	-7	50.0	49.4	9	4	9	33.3	29.6	9	10	-	23.8	31.8	10	-7	7	33.4	36.7	9	0	-7	50.0	49.4
9	0	-5	93.5	93.7	9	4	11	27.9	27.6	9	10	-1	64.6	70.4	10	-7	9	48.3	50.7	9	0	-5	93.5	93.7
9	0	-3	103.4	103.6	9	5	-10	28.4	18.3	9	10	1	13.0	8.0	10	-6	-8	29.4	28.2	9	0	-3	103.4	103.6
9	0	-1	115.0	117.0	9	5	-8	27.0	23.5	9	10	3	36.5	44.5	10	-6	-6	42.9	40.5	9	0	-1	115.0	117.0
9	0	1	110.1	111.1	9	5	-6	21.3	5.6	9	10	5	22.2	20.9	10	-6	-4	42.9	40.5	9	0	1	110.1	111.1
9	0	3	101.9	106.9	9	5	-4	68.2	66.0	9	10	7	14.1	10.8	10	-6	-2	114.3	118.5	9	0	3	101.9	106.9
9	0	5	93.6	95.2	9	5	-2	102.6	104.8	9	11	-6	43.7	40.3	10	-6	0	21.6	19.5	9	0	5	93.6	95.2
9	0	7	50.5	53.8	9	5	0	47.2	45.0	9	11	-4	59.9	56.7	10	-6	2	25.6	27.9	9	0	7	50.5	53.8
9	0	9	75.8	77.0	9	5	2	76.4	76.7	9	11	-2	74.1	67.1	10	-6	4	47.4	51.1	9	0	9	75.8	77.0
9	0	11	76.5	76.8	9	5	4	64.5	67.9	9	11	0	41.0	38.2	10	-6	6	36.2	27.9	9	0	11	76.5	76.8
9	1	-10	64.7	69.3	9	5	6	89.9	86.1	9	11	2	91.8	85.5	10	-6	8	47.4	51.1	9	1	-10	64.7	69.3
9	1	-8	70.5	72.7	9	5	8	59.4	58.0	9	11	4	63.6	61.0	10	-6	8	36.2	27.9	9	1	-8	70.5	72.7
9	1	-6	60.1	60.3	9	5	10	97.3	96.9	9	11	6	94.9	89.3	10	-6	8	33.0	27.4	9	1	-6	60.1	60.3
9	1	-4	103.6	114.4	9	5	-9	60.5	61.4	9	12	-3	43.0	44.6	10	-5	-7	73.4	77.6	9	1	-4	103.6	114.4
9	1	-2	68.2	71.0	9	5	-7	90.5	93.2	9	12	-1	96.1	94.7	10	-5	-5	55.1	59.1	9	1	-2	68.2	71.0
9	1	0	54.7	60.4	9	5	-5	66.0	67.6	9	12	1	35.6	36.1	10	-5	-3	101.0	101.0	9	1	0	54.7	60.4
9	1	2	67.0	69.8	9	5	-3	102.6	102.5	9	12	3	99.8	94.3	10	-5	-1	66.7	69.9	9	1	2	67.0	69.8
9	1	4	19.5	18.4	9	5	-1	103.9	103.7	9	12	5	62.0	65.3	10	-5	1	18.8	19.2	9	1	4	19.5	18.4
9	1	6	81.3	84.1	9	5	3	85.8	84.3	9	12	-3	92.9	89.8	10	-5	3	11.9	19.2	9	1	6	81.3	84.1
9	1	8	34.4	35.1	9	5	5	79.2	79.3	9	12	-1	31.5	20.9	10	-5	5	12.8	10.6	9	1	8	34.4	35.1
9	1	10	51.9	54.9	9	5	7	96.5	99.8	9	12	1	84.0	80.2	10	-5	7	13.7	13.7	9	1	10	51.9	54.9
9	2	-1	13.8	2.7	9	6	9	67.7	70.0	9	10	-11	13.7	8.4	10	-4	-10	13.8	8.3	9	2	-1	13.8	2.7
9	2	-3	58.7	56.4	9	6	7	56.8	58.7	9	10	-9	34.0	37.1	10	-4	-8	83.9	86.4	9	2	-3	58.7	56.4
9	2	-5	23.2	15.4	9	6	-10	13.2	16.8	9	10	-7	26.3	33.1	10	-4	-6	29.9	30.3	9	2	-5	23.2	15.4
9	2	-7	75.6	73.2	9	6	-8	111.0	112.8	9	10	-5	39.5	41.1	10	-4	-4	122.8	123.2	9	2	-7	75.6	73.2
9	2	-9	86.5	84.4	9	6	-6	16.2	6.7	9	10	-3	105.7	104.6	10	-4	-2	11.5	18.2	9	2	-9	86.5	84.4
9	2	-1	91.9	90.6	9	6	-4	77.0	79.4	9	10	-1	23.2	29.1	10	-4	0	142.0	139.8	9	2	-1	91.9	90.6
9	2	1	23.1	16.9	9	6	2	11.7	6.1	9	10	1	84.2	91.8	10	-4	2	40.8	39.9	9	2	1	23.1	16.9
9	2	3	122.1	119.2	9	6	4	73.3	78.3	9	10	-9	45.7	40.4	10	-4	4	30.8	27.7	9	2	3	122.1	119.2
9	2	5	157.7	157.3	9	6	6	20.1	24.4	9	10	-7	146.8	145.8	10	-4	6	79.6	80.1	9	2	5	157.7	157.3
9	2	7	157.7	157.3	9	6	8	39.8	45.7	9	10	-5	146.8	145.8	10	-4	8	73.5	74.9	9	2	7	157.7	157.3
9	2	9	157.7	157.3	9	6	10	45.7	6.1	9	10	-3	26.8	22.8	10	-4	10	24.4	6.8	9	2	9	157.7	157.3
9	2	11	19.1	16.5	9	6	12	13.5	6.1	9	10	-1	157.5	158.6	10	-4	12	24.4	77.8	9	2	11	19.1	16.5
9	2	-10	66.2	58.0	9	6	-9	64.6	62.1	9	10	-9	31.6	33.4	10	-3	-9	77.8	70.1	9	2	-10	66.2	58.0
9	2	-8	107.5	105.0	9	6	-7	48.4	40.4	9	10	-7	66.6	62.3	10	-3	-7	66.8	61.5	9	2	-8	107.5	105.0
9	2	-6	48.8	44.9	9	6	-5	60.3	58.5	9	10	-5	52.3	47.9	10	-3	-5	43.2	38.9	9	2	-6	48.8	44.9
9	2	-4	151.6	149.2	9	6	-3	65.2	61.4	9	10	-3	71.1	64.4	10	-3	-3	27.3	23.6	9	2	-4	151.6	149.2
9	2	-2	25.1	14.4	9	6	-1	51.6	48.1	9	10	-1	92.1	89.9	10	-3	-1	41.0	44.7	9	2	-2	25.1	14.4
9	2	0	164.7	165.7	9	6	1	95.8	90.2	9	10	-8	34.6	26.4	10	-3	1	43.5	46.4	9	2	0	164.7	165.7
9	2	2	47.7	46.1	9	6	3	84.8	80.5	9	10	-6	53.4	52.5	10	-3	3	52.0	43.8	9	2	2	47.7	46.1
9	2	4	184.5	185.8	9	6	5	112.5	105.4	9	10	-4	12.8	18.7	10	-3	5	17.3	12.3	9	2	4	184.5	185.8
9	2	6	60.2	58.5	9	6	7	50.2	49.6	9	10	-2	56.4	49.8	10	-3	7	26.1	24.1	9	2	6	60.2	58.5
9	2	8	82.8	79.4	9	6	9	93.0	86.3	9	10	-8	22.8	12.4	10	-3	9	22.4	14.2	9	2	8	82.8	79.4
9	2	10	70.4	61.7	9	6	-8	60.5	55.7	9	10	-8	21.8	17.0	10	-3	10	24.0	33.2	9	2	10	70.4	61.7
9	3	-11	44.4	35.0	9	6	-6	60.5	57.7	9	10	-8	13.3	13.3	10	-2	-10	30.7	36.4	9	3	-11	44.4	35.0
9	3	-9	54.4	59.9	9	6	-4	85.6	83.3	9	10	-6	44.3	44.4	10	-2	-8	19.1	18.4	9	3	-9	54.4	59.9
9	3	-7	21.3	23.6	9	6	-2	87.3	81.6	9	10	-4	31.1	36.5	10	-2	-6	60.0	53.4	9	3	-7	21.3	23.6
9	3	-5	86.1	84.0	9	6	0	110.9	106.4	9	10	-2	82.1	87.8	10	-2	-4	16.3	40.9	9	3	-5	86.1	84.0
9	3	-3	85.5	81.8	9	6	2	47.9	48.1	9	10	-7	31.4	41.5	10	-2	-2	39.9	55.1	9	3	-3	85.5	81.8
9	3	-1	106.8	106.7	9	6	4	83.2	81.0	9	10	-7	62.5	70.0	10	-2	0	52.9	48.7	9	3	-1	106.8	106.7
9	3	1	18.9	14.8	9	6	6	95.9	94.3	9	10	-7	85.2	85.2	10	-2	2	50.2	46.6	9	3	1	18.9	14.8
9	3	3	53.0	51.1	9	6	8	29.8	26.1	9	10	-7	73.5	75.2	10	-2	4	14.7	9.3	9	3	3	53.0	51.1

10	H	K	L	FO	FC	10	H	K	L	FO	FC	10	H	K	L	FO	FC	10	H	K	L	FO	FC
10	-1	-11		37.8	42.8	10	10	3	5	40.1	34.8	10	10	9	-3	62.4	58.1	11	-6	7	21.3	26.3	
10	-1	-9		37.1	33.3	10	10	3	7	56.7	51.3	10	10	9	-1	32.8	25.5	11	-5	8	48.3	43.8	
10	-1	-7		48.5	49.2	10	10	3	8	64.8	65.1	10	10	9	1	148.4	146.9	11	-5	8	52.4	57.2	
10	-1	-5		30.5	30.8	10	10	4	-10	19.1	8.1	10	10	9	3	24.7	14.8	11	-5	-4	34.3	36.0	
10	-1	-3		90.6	94.3	10	10	4	-8	71.6	68.0	10	10	9	5	135.7	132.6	11	-5	-2	47.1	54.2	
10	-1	-1		11.2	23.0	10	10	4	-6	21.2	16.9	10	10	9	7	35.4	25.1	11	-5	0	32.6	37.7	
10	-1	-1		23.2	27.8	10	10	4	-4	73.1	73.2	10	10	10	-6	30.5	30.1	11	-5	2	76.5	71.4	
10	-1	-1		44.7	48.1	10	10	4	-2	43.6	47.2	10	10	10	-4	81.7	80.7	11	-5	4	14.2	14.9	
10	-1	-1		35.2	27.7	10	10	4	0	132.4	128.5	10	10	10	-2	17.3	15.7	11	-5	6	103.3	103.1	
10	-1	-1		23.9	24.4	10	10	4	2	20.1	7.6	10	10	10	0	98.6	94.6	11	-5	8	13.4	5.6	
10	-1	-1		13.0	11.2	10	10	4	4	113.8	114.5	10	10	10	2	32.6	30.5	11	-4	-9	13.7	4.2	
10	-1	-1		45.9	47.0	10	10	4	4	30.1	21.3	10	10	10	4	32.5	26.8	11	-4	-7	31.4	17.3	
10	0	-10		73.6	72.5	10	10	4	8	82.7	79.0	10	10	10	6	29.4	32.9	11	-4	-5	18.4	17.3	
10	0	-8		26.3	23.0	10	10	4	10	13.8	5.6	10	10	11	-3	13.9	7.2	11	-4	-3	12.1	18.6	
10	0	-6		83.4	89.4	10	10	5	-9	13.2	22.1	10	10	11	-1	74.8	75.3	11	-4	-1	15.6	6.2	
10	0	-4		70.6	64.6	10	10	5	-7	12.7	17.9	10	10	11	1	29.6	21.8	11	-4	1	36.0	39.0	
10	0	0		140.2	141.0	10	10	5	-5	13.9	15.4	10	10	11	3	84.0	83.7	11	-4	3	49.5	51.4	
10	0	0		183.2	181.7	10	10	5	-3	20.8	8.6	10	10	12	0	52.4	49.6	11	-4	5	23.3	20.7	
10	0	0		135.5	140.4	10	10	5	-1	23.3	21.1	10	10	12	0	56.9	51.8	11	-4	7	48.6	48.0	
10	0	0		65.7	65.5	10	10	5	1	64.8	61.2	10	10	11	-3	45.4	48.7	11	-4	9	13.7	13.8	
10	0	0		80.7	83.5	10	10	5	3	99.6	105.9	10	10	11	-1	46.5	41.6	11	-3	-10	18.4	16.0	
10	0	0		34.7	28.4	10	10	5	5	57.1	53.6	10	10	11	1	78.8	79.3	11	-3	-8	13.0	3.8	
10	0	0		64.6	66.5	10	10	5	7	69.5	75.6	10	10	11	3	48.6	50.4	11	-3	-6	20.0	11.5	
10	0	-11		36.7	45.3	10	10	5	9	20.3	28.2	10	10	11	-6	16.6	12.7	11	-3	-4	16.3	6.5	
10	0	-9		19.6	10.7	10	10	6	-8	37.8	23.1	10	10	11	-4	42.0	43.1	11	-3	-2	28.2	32.6	
10	0	-7		15.0	17.0	10	10	6	-6	45.2	45.2	10	10	11	-2	13.3	3.8	11	-3	0	22.7	13.4	
10	0	-5		30.2	33.1	10	10	6	-4	14.3	12.4	10	10	11	0	34.9	17.4	11	-3	2	39.4	25.6	
10	0	-3		37.7	42.8	10	10	6	-2	87.3	90.9	10	10	11	-9	20.9	14.3	11	-3	4	33.3	39.9	
10	0	-1		21.5	19.0	10	10	6	0	25.4	21.3	10	10	11	-9	34.5	34.2	11	-3	6	47.3	50.3	
10	0	1		11.9	15.8	10	10	6	2	107.3	109.4	10	10	11	-9	22.3	5.4	11	-3	8	18.4	8.7	
10	0	1		82.6	84.1	10	10	6	4	25.9	33.6	10	10	11	-7	20.6	24.3	11	-3	10	14.2	6.5	
10	0	1		28.0	23.2	10	10	6	6	89.9	93.6	10	10	11	-5	34.0	36.5	11	-2	-9	15.2	4.1	
10	0	1		38.2	38.3	10	10	6	8	17.1	22.5	10	10	11	-3	43.6	41.4	11	-2	-7	92.7	97.7	
10	0	1		31.6	29.9	10	10	7	-9	42.9	42.9	10	10	11	-8	12.7	14.3	11	-2	-5	12.3	22.6	
10	0	1		40.6	36.7	10	10	7	-7	27.0	26.6	10	10	11	-8	32.5	30.0	11	-2	-3	54.4	59.4	
10	0	-10		13.7	6.4	10	10	7	-5	68.2	46.6	10	10	11	3	41.5	53.6	11	-2	-1	39.8	44.4	
10	0	-8		56.2	56.5	10	10	7	-3	76.8	78.4	10	10	11	5	21.3	18.4	11	-2	1	45.6	52.4	
10	0	-6		21.2	17.7	10	10	7	-1	55.1	54.6	10	10	11	-8	20.7	16.9	11	-2	3	69.5	75.1	
10	0	-4		57.9	55.7	10	10	7	1	60.7	60.6	10	10	11	-6	13.3	5.7	11	-2	5	18.7	8.3	
10	0	-2		42.1	42.3	10	10	7	3	66.0	62.9	10	10	11	-4	22.3	22.3	11	-2	7	57.5	60.5	
10	0	2		49.9	47.4	10	10	7	5	36.2	35.5	10	10	11	-2	38.7	38.7	11	-2	9	14.9	10.3	
10	0	2		11.8	17.1	10	10	7	7	78.6	79.2	10	10	11	-2	38.7	40.7	11	-1	-10	14.0	10.9	
10	0	2		57.5	54.6	10	10	7	9	35.6	36.6	10	10	11	-7	15.2	15.4	11	-1	-8	12.9	4.5	
10	0	2		26.1	13.9	10	10	8	-8	29.2	30.2	10	10	11	-7	32.6	33.2	11	-1	-6	27.7	13.7	
10	0	2		35.6	33.9	10	10	8	-6	25.2	19.5	10	10	11	-7	44.2	44.5	11	-1	-4	11.8	10.6	
10	0	2		32.7	32.7	10	10	8	-4	15.8	11.1	10	10	11	-7	14.3	23.2	11	-1	-2	34.1	25.2	
10	0	-11		27.2	31.5	10	10	8	-2	17.8	14.9	10	10	11	-7	13.9	5.3	11	-1	0	48.5	49.3	
10	0	-9		13.2	9.3	10	10	8	0	52.9	51.4	10	10	11	-6	30.4	33.4	11	-1	2	54.3	49.3	
10	0	-7		24.2	29.0	10	10	8	2	28.1	15.7	10	10	11	-5	23.4	26.8	11	-1	4	11.8	16.7	
10	0	-5		17.4	13.8	10	10	8	4	55.7	52.3	10	10	11	-6	12.9	10.8	11	-1	6	42.9	43.1	
10	0	-3		40.6	41.9	10	10	8	6	30.4	26.7	10	10	11	-6	24.5	24.6	11	-1	8	13.2	4.5	
10	0	-1		43.1	43.7	10	10	8	8	90.1	82.8	10	10	11	-6	32.9	33.0	11	-1	10	52.9	49.4	
10	0	3		43.1	41.4	10	10	9	8	53.9	58.5	10	10	11	-6	51.0	58.7	11	0	-9	13.5	20.0	
10	0	3		29.1	20.0	10	10	9	-5	45.8	38.7	10	10	11	5	42.8	37.3	11	0	-7	37.3	30.2	

H	K	L	FO	FC	H	K	L	FO	FC	H	K	L	FO	FC	H	K	L	FO	FC
11	0	-5	27.0	29.4	11	5	0	28.5	21.1	12	-7	-3	91.0	92.9	12	-1	3	11.8	5.8
11	0	-3	21.8	6.2	11	5	2	46.1	40.8	12	-7	-1	26.2	28.2	12	-1	5	43.1	37.1
11	0	-1	13.8	2.6	11	5	4	27.8	22.9	12	-7	1	72.1	69.4	12	-1	7	22.6	23.4
11	0	1	11.5	4.2	11	5	6	55.5	51.7	12	-7	3	20.6	11.2	12	-1	9	48.5	42.3
11	0	3	11.7	7.0	11	5	8	45.1	35.6	12	-7	5	64.9	62.1	12	0	-8	58.9	56.7
11	0	5	37.8	39.2	11	6	-7	16.2	18.3	12	-6	-6	60.9	50.9	12	0	-6	24.2	26.1
11	0	7	40.4	37.1	11	6	-5	42.8	38.7	12	-6	-4	87.8	83.4	12	0	-4	69.1	66.1
11	0	9	24.4	12.7	11	6	-3	48.7	45.8	12	-6	-2	64.7	56.7	12	0	-2	27.1	25.8
11	0	-10	56.1	58.1	11	6	-1	47.3	41.6	12	-6	0	91.4	81.5	12	0	0	91.9	93.4
11	1	-8	19.4	20.5	11	6	1	12.2	7.6	12	-6	2	47.4	36.8	12	0	2	33.3	26.2
11	1	-6	57.0	59.5	11	6	3	16.9	19.6	12	-6	4	94.6	89.4	12	0	4	66.6	67.0
11	1	-4	20.1	5.4	11	6	5	18.4	9.2	12	-6	6	27.4	9.4	12	0	6	35.3	27.3
11	1	-2	68.2	72.0	11	6	7	28.2	20.8	12	-5	-7	23.7	5.9	12	0	8	68.2	60.2
11	1	0	71.2	69.6	11	7	-8	25.0	23.6	12	-5	-5	57.1	49.8	12	1	-9	52.5	50.8
11	1	2	45.6	49.9	11	7	-6	13.4	5.4	12	-5	-3	12.7	13.6	12	1	-7	13.2	7.5
11	1	4	23.4	16.9	11	7	-4	56.5	62.7	12	-5	-1	34.2	29.2	12	1	-5	50.2	48.8
11	1	6	35.0	38.2	11	7	-2	12.7	11.0	12	-5	1	15.4	6.4	12	1	-3	13.2	16.5
11	1	8	34.9	18.1	11	7	0	42.1	39.1	12	-5	3	12.5	9.6	12	1	-1	28.7	26.3
11	1	10	30.6	32.8	11	7	2	21.0	26.0	12	-5	5	26.6	39.6	12	1	1	32.6	35.9
11	2	-9	32.1	31.2	11	7	4	25.0	19.9	12	-4	-8	38.0	36.6	12	1	3	22.6	25.7
11	2	-7	39.4	35.6	11	7	6	13.5	15.3	12	-4	-6	28.2	30.7	12	1	5	41.8	45.1
11	2	-5	33.1	31.9	11	7	8	14.1	3.2	12	-4	-4	38.0	36.6	12	1	7	13.1	7.4
11	2	-3	52.5	49.2	11	8	-7	55.8	48.5	12	-4	-4	13.4	10.0	12	1	9	49.0	47.8
11	2	-1	33.6	27.1	11	8	-5	13.4	6.3	12	-4	-2	54.8	54.2	12	2	-8	28.2	25.1
11	2	1	26.1	22.9	11	8	-3	36.6	39.8	12	-4	0	12.1	5.1	12	2	-6	12.9	15.5
11	2	3	41.1	43.1	11	8	-1	12.9	17.1	12	-4	2	56.7	52.5	12	2	-4	28.3	3.7
11	2	5	12.1	4.4	11	8	1	24.4	10.0	12	-4	4	12.5	6.2	12	2	-2	40.9	42.0
11	2	7	87.9	89.1	11	8	3	39.8	35.5	12	-4	6	26.2	20.2	12	2	0	47.6	45.1
11	2	9	14.0	7.4	11	8	5	33.8	31.5	12	-4	8	29.2	23.8	12	2	2	13.6	10.1
11	2	10	13.2	6.8	11	8	7	22.1	24.0	12	-3	-9	48.9	41.2	12	2	4	16.8	8.0
11	3	-8	13.2	6.8	11	9	-6	20.8	3.2	12	-3	-7	66.9	62.1	12	2	6	12.8	2.1
11	3	-6	48.1	47.4	11	9	-4	25.5	21.2	12	-3	-5	57.4	60.6	12	2	8	13.4	9.2
11	3	-4	15.9	21.6	11	9	-2	27.0	27.9	12	-3	-3	32.3	26.0	12	2	9	28.8	18.7
11	3	0	37.0	39.1	11	9	0	13.4	17.5	12	-3	-1	69.4	70.4	12	3	-7	42.1	48.1
11	3	2	11.5	5.4	11	9	2	25.7	13.4	12	-3	1	34.2	32.9	12	3	-5	38.1	36.1
11	3	4	36.8	44.2	11	9	4	33.7	27.2	12	-3	3	60.0	58.5	12	3	-3	53.0	55.2
11	3	6	20.2	5.1	11	9	6	13.9	0.7	12	-3	5	35.1	29.1	12	3	-1	44.6	40.5
11	3	8	12.4	3.2	11	10	-3	62.1	64.8	12	-3	7	47.2	50.0	12	3	1	69.2	70.3
11	3	10	20.4	9.2	11	10	-1	51.5	58.8	12	-3	9	32.9	17.1	12	3	3	69.2	70.3
11	4	-9	16.2	6.0	11	10	1	61.3	53.0	12	-2	-8	13.5	16.4	12	3	5	59.0	61.0
11	4	-7	62.4	61.3	11	10	3	38.8	30.0	12	-2	-6	12.9	15.3	12	3	7	76.2	73.8
11	4	-5	12.4	3.9	11	11	-2	14.1	10.8	12	-2	-4	17.7	14.1	12	3	9	48.3	46.1
11	4	-3	72.1	71.8	11	11	0	49.5	43.8	12	-2	-2	18.0	5.3	12	4	-8	26.0	32.9
11	4	1	20.8	9.5	11	11	3	14.2	8.0	12	-2	0	55.4	28.5	12	4	-6	39.4	39.3
11	4	3	29.0	35.4	11	12	-1	76.7	72.7	12	-2	2	30.4	26.7	12	4	-4	12.5	14.7
11	4	5	40.5	6.9	11	12	1	40.4	29.6	12	-2	4	17.6	10.1	12	4	-2	65.8	67.4
11	4	7	16.1	17.5	11	12	-3	95.8	98.3	12	-2	6	43.5	40.8	12	4	0	12.2	17.5
11	4	9	13.9	26.5	11	12	-4	21.1	8.6	12	-1	-9	42.5	34.7	12	4	2	25.1	26.6
11	5	-8	17.3	12.5	11	12	-2	37.6	32.9	12	-1	-7	19.6	22.0	12	4	4	42.8	52.0
11	5	-6	88.7	79.1	11	12	0	35.6	30.2	12	-1	-5	36.5	27.3	12	4	6	46.2	47.3
11	5	-4	12.4	7.6	11	12	-8	13.5	4.1	12	-1	-3	29.5	22.4	12	5	-7	36.1	43.8
11	5	-2	53.7	52.1	11	12	-7	13.6	18.9	12	-1	-1	18.2	8.0	12	5	-5	31.5	18.2
11	5	-2	53.7	52.1	11	12	-7	13.6	18.9	12	-1	-1	13.0	11.4	12	5	-3	16.6	13.5

H	K	L	FO	FC	H	K	L	FO	FC	H	K	L	FO	FC	H	K	L	FO	FC	H	K	L	FO	FC
12	5	-1	16.0	7.1	13	-4	-3	42.8	42.1	13	2	7	63.7	58.6	14	-3	-5	21.0	6.7					
12	5	1	26.7	20.9	13	-4	-1	37.1	38.7	13	3	-6	114.2	116.1	14	-3	-3	13.5	13.8					
12	5	3	20.9	24.3	13	-4	1	38.4	37.6	13	3	-4	63.1	56.1	14	-3	-1	18.4	15.1					
12	5	5	53.2	42.2	13	-4	3	12.7	4.9	13	3	0	24.6	9.2	14	-3	1	14.1	10.3					
12	5	7	18.3	6.9	13	-4	5	29.8	34.7	13	3	2	102.9	103.6	14	-3	3	23.8	22.5					
12	6	-6	13.6	11.8	13	-4	7	28.3	24.2	13	3	4	15.7	16.8	14	-3	5	13.7	5.0					
12	6	-4	89.4	87.8	13	-3	-6	114.9	113.9	13	3	6	103.4	107.5	14	-2	-6	23.9	16.4					
12	6	-2	45.7	42.4	13	-3	-4	22.4	13.7	13	4	-7	22.3	19.5	14	-2	-4	13.6	17.1					
12	6	0	89.4	83.8	13	-3	-2	108.0	109.6	13	4	-5	33.2	26.4	14	-2	-2	29.0	21.5					
12	6	2	67.4	62.6	13	-3	0	17.9	9.2	13	4	-3	12.9	9.6	14	-2	0	45.0	40.9					
12	6	4	92.2	86.3	13	-3	2	120.2	119.6	13	4	-1	23.4	28.3	14	-2	2	22.0	12.5					
12	6	6	61.2	58.5	13	-3	4	56.4	57.9	13	4	1	23.7	28.9	14	-2	4	18.2	15.0					
12	7	-7	14.0	10.3	13	-3	6	119.1	117.8	13	4	3	24.5	29.5	14	-2	6	13.9	1.4					
12	7	-5	74.3	69.5	13	-2	-7	59.7	55.8	13	4	5	13.1	10.4	14	-1	-5	32.0	33.7					
12	7	-3	20.7	25.0	13	-2	-5	33.2	31.2	13	4	7	18.5	15.5	14	-1	-3	25.0	25.5					
12	7	-1	80.3	77.4	13	-2	-3	17.7	12.4	13	4	-6	13.8	5.7	14	-1	-1	39.4	39.4					
12	7	1	22.0	13.8	13	-2	-1	36.1	35.0	13	5	-4	19.8	17.1	14	-1	1	41.0	41.6					
12	7	3	101.1	102.6	13	-2	1	13.7	8.9	13	5	-2	13.1	8.4	14	-1	3	13.3	12.6					
12	7	5	15.0	3.0	13	-2	3	20.9	21.1	13	5	0	24.4	20.8	14	-1	5	37.1	45.2					
12	8	-6	20.2	3.6	13	-2	5	27.8	4.8	13	5	2	13.0	8.7	14	-1	-6	13.8	5.6					
12	8	-4	13.8	11.8	13	-2	7	14.0	27.1	13	5	4	41.7	34.1	14	-1	-4	28.8	31.2					
12	8	-2	13.4	6.1	13	-1	-8	60.9	58.2	13	5	6	45.0	49.4	14	-1	-2	32.2	33.4					
12	8	0	35.1	26.8	13	-1	-6	15.4	17.4	13	6	-5	45.9	43.7	14	-1	0	46.7	47.7					
12	8	2	37.4	25.5	13	-1	-4	89.1	87.8	13	6	-3	76.0	71.2	14	-1	2	21.8	34.0					
12	9	-3	20.9	9.1	13	-1	2	54.4	42.3	13	6	1	29.8	29.8	14	-1	4	28.6	27.0					
12	9	-1	44.2	38.6	13	-1	0	41.1	43.6	13	6	3	54.3	54.9	14	-1	6	13.8	11.8					
12	9	1	72.9	71.9	13	-1	4	74.6	68.3	13	6	5	125.1	118.8	14	-1	-3	29.2	25.8					
12	9	3	87.0	80.5	13	-1	6	24.0	26.6	13	7	-4	49.8	54.0	14	-1	-1	29.5	16.0					
12	10	0	14.0	19.4	13	-1	8	43.4	42.1	13	7	-2	13.5	3.7	14	-1	1	18.7	16.0					
13	-8	-3	73.3	72.9	13	0	-7	38.0	30.8	13	7	0	78.4	79.4	14	-1	3	14.4	0.9					
13	-8	-1	43.5	46.1	13	0	-5	49.4	46.2	13	7	2	13.6	69.2	14	-1	-6	13.8	17.4					
13	-8	1	65.5	59.5	13	0	-3	39.0	30.0	13	7	4	71.4	49.7	14	-1	-4	27.0	36.0					
13	-8	3	48.8	55.7	13	0	-1	51.4	48.1	13	8	-3	47.1	49.7	14	-1	5	14.5	6.6					
13	-7	-4	72.0	79.5	13	0	1	52.5	50.3	13	8	-1	65.9	61.2	14	-2	-2	14.5	11.4					
13	-7	-2	13.4	5.8	13	0	3	50.4	42.1	13	8	1	35.3	38.1	14	-2	0	56.6	61.9					
13	-7	0	80.4	89.7	13	0	5	38.5	25.9	13	8	3	67.4	67.4	14	-2	2	29.5	38.9					
13	-7	2	13.4	8.0	13	0	7	41.2	38.7	13	8	5	37.2	27.6	14	-2	4	21.4	36.2					
13	-7	4	59.7	63.5	13	1	-8	38.1	31.3	13	8	-1	15.3	33.1	14	-2	6	28.5	29.8					
13	-6	-5	119.4	126.5	13	1	-6	29.5	34.2	14	-6	-2	20.0	8.9	14	-5	-5	13.7	5.3					
13	-6	-3	48.6	45.1	13	1	-4	68.1	64.4	14	-6	0	36.1	43.9	14	-5	-3	28.9	18.2					
13	-6	-1	52.3	55.8	13	1	-2	50.6	55.8	14	-6	2	23.2	19.9	14	-4	-3	16.2	10.2					
13	-6	1	41.4	37.0	13	1	0	55.5	48.5	14	-6	4	24.0	28.0	14	-4	-1	13.5	6.7					
13	-6	3	78.5	74.2	13	1	2	47.0	51.3	14	-5	-5	65.5	62.6	14	-3	3	19.3	21.0					
13	-6	5	60.4	47.3	13	1	4	79.9	75.8	14	-5	-3	17.5	17.8	14	-4	5	25.6	10.6					
13	-5	-6	46.4	51.4	13	1	6	16.1	24.3	14	-5	-1	34.1	36.5	14	-4	-4	14.4	15.1					
13	-5	-4	48.7	35.1	13	1	8	52.6	49.8	14	-5	1	19.9	8.3	14	-4	-2	29.9	25.3					
13	-5	-2	18.2	14.2	13	2	-7	37.7	37.4	14	-5	3	13.9	8.9	14	-4	0	44.8	40.6					
13	-5	0	30.5	17.7	13	2	-5	13.1	8.7	14	-5	5	45.8	38.6	14	-4	2	13.7	25.4					
13	-5	2	15.8	13.0	13	2	-3	16.3	10.3	14	-4	-4	13.9	9.3	14	-4	4	30.1	13.9					
13	-5	4	23.8	28.3	13	2	-1	19.6	14.2	14	-4	-2	36.3	49.8	14	-4	-5	49.2	52.2					
13	-4	6	21.8	9.5	13	2	1	32.1	29.0	14	-4	2	23.3	17.1	14	-5	-3	14.0	22.7					
13	-4	7	21.5	24.5	13	2	3	24.3	16.7	14	-4	4	37.6	46.6	14	-5	-1	24.7	22.3					
13	-4	9	14.5	14.7	13	2	5	24.1	26.6	14	-4	4	13.7	14.6	14	-5	1	44.0	51.4					

14	H	K	L	FD	FC	H	K	L	FD	FC	H	K	L	FD	FC	H	K	L	FD	FC
14	5	5	3	13.7	7.6	15	-4	-1	24.2	15.4	15	-2	1	13.7	9.0	15	0	3	35.7	21.6
14	5	5	5	61.4	68.9	15	-4	1	46.4	45.5	15	-2	3	27.1	30.9	15	1	-4	34.6	42.8
14	6	6	-4	20.1	23.1	15	-4	3	14.2	29.1	15	-1	-4	42.1	32.1	15	1	-4	16.3	4.3
14	6	6	-2	27.4	26.8	15	-3	-4	31.8	8.8	15	-1	-2	14.6	6.9	15	1	0	13.6	17.2
14	6	6	0	42.0	32.8	15	-3	-2	24.7	12.2	15	-1	0	16.9	6.2	15	1	2	23.9	22.5
14	6	6	2	13.8	16.2	15	-3	0	47.9	34.9	15	-1	2	23.1	23.1	15	1	4	45.7	48.8
14	6	6	4	14.0	2.7	15	-3	2	24.2	7.5	15	0	4	34.4	29.0	15	2	-3	34.7	41.4
14	7	7	-1	22.8	11.0	15	-3	4	46.7	37.6	15	0	-3	13.9	16.6	15	2	-1	13.7	6.9
14	7	7	1	48.8	47.6	15	-2	-3	17.3	3.0	15	0	-1	16.9	10.9	15	2	1	13.5	4.3
15	-5	-5	0	13.9	7.6	15	-2	-1	20.3	16.5	15	0	1	26.3	8.0	15	2	3	34.8	17.2
15	-4	-4	-3	41.6	40.8	15	-2	-1			15					15				