

Straus Theory Exercises
 Ch. 2: I-II (pp. 61-62)

ANSWERS

I. 1. Normal Form using pc letter name notation:

	PC Set	Normal Form
a.	(D, G, Bb, E, F#)	[D, E, F#, G, Bb]
b.	(F#, B, D)	[B, D, F#]
c.	(E, A, D, G)	[D, E, G, A]
d.	(F#, G, A#, C, C#, E)	[E, F#, G, A#, C, C#]
e.	(Eb, Gb, Bb, D)	[D, Eb, Gb, Bb]
f.	(C#, G, C#)	[C#, F#, G]
g.	(F, Ab, B, C, D)	[B, C, D, F, Ab]

I. 2. Normal Form using pc integer notation [C=0]:

	PC Set	Normal Form
a.	(11, 5, 7, 2)	[11, 2, 5, 7]
b.	(0, 10, 5)	[10, 0, 5]
c.	(7, 6, 9, 1)	[6, 7, 9, 1]
d.	(4, 7, 2, 7, 11)	[11, 2, 4, 7]
e.	(0, 2, 4, 5, 7, 9, 11)	[11, 0, 2, 4, 5, 7, 9]
f.	(3, 0, 11, 10, 4, 7)	[10, 11, 0, 3, 4, 7]
g.	(9, 11, 2, 5, 9, 8, 1, 2)	[8, 9, 11, 1, 2, 5]

II. 1. T_n , pc letter name notation:

	Algebraic notation	after T_n	Normal Form
a.	T_8 [D, E, F#, G]	(Bb, C, D, Eb)	[Bb, C, D, Eb]
b.	T_3 [C, Eb, Gb, A]	(Eb, Gb, A, C)	[C, Eb, Gb, A]
c.	T_6 [F#, G, C]	(C, C#, F#)	[C, C#, F#]
d.	T_4 [G#, A, B, C, E]	(C, C#, D#, E, G#)	[C, C#, D#, E, G#]

II. 2. T_n , pc integer notation:

	Algebraic notation	after T_n	Normal Form
a.	T_3 [8, 0, 3]	(11, 3, 6)	[11, 3, 6]
b.	T_9 [1, 4, 7, 10]	(10, 1, 4, 7)	[1, 4, 7, 10]
c.	T_6 [5, 7, 9, 11, 2]	(11, 1, 3, 5, 8)	[11, 1, 3, 5, 8]
d.	T_7 [9, 11, 1, 2, 4, 6]	(4, 6, 8, 9, 11, 1)	[4,6,8,9,11,1]

II. 3. Related by T_n ?:

	Algebraic notation	Related by T_n ?
a.	T_x [8, 9, 11, 0, 4] =? [4, 5, 7, 8, 0]	Yes, by T_8
b.	T_x [7, 9, 1] =? [1, 5, 7]	No, but yes by T_2I
c.	T_x [7, 8, 10, 1, 4] =? [1, 2, 4, 7, 10]	Yes, by T_6
d.	T_x [1, 2, 5, 9] =? [11, 0, 3, 7]	Yes, by T_{10}