Working to make logic to predict number of cycles required after which timer will set intr_timer_expired_0_0_o signal

Prescale	Step	Count	Count/step (number of clock cycles from formula)	Divide reminder	Calculated q	Calculated r	Waveform result (number of clock cycles from formula)
0	1	7	7	0	7	0	7
0	2	7	3	1			4
0	3	7	2	1			3
0	4	7	1	3			2
0	5	7	1	2			2
0	6	7	1	1			2
0	7	7	1	0			1

Prescale	Step	Count	Count/step (number of clock cycles from formula)	Divide reminder	Calculated q	Calculated r	Waveform result (number of clock cycles from formula)
0	1	23	23	0			23
0	2	23	11	1			12
0	3	23	7	2			8
0	4	23	5	3			6
0	5	23	4	3			5
0	6	23	3	5			4
0	7	23	3	2			4
0	8	23	2	7			3
0	9	23	2	5			3
0	10	23	2	3			3
0	11	23	2	1			3
0	12	23	1	11			2
0	13	23	1	10			2
0	14	23	1	9			2
0	15	23	1	8			2
0	16	23	1	7			2
0	17	23	1	6			2
0	18	23	1	5			2
0	19	23	1	4			2
0	20	23	1	3			2
0	21	23	1	2			2
0	22	23	1	1			2

0	23	23	1	0			1

Prescale	Step	Count	Count/step (number of clock cycles from formula)	Divide reminder	Calculated q	Calculated r	Waveform result (number of clock cycles from formula)
0	1	8	8	0			8
0	2	8	4	0			4
0	3	8	2	2			3
0	4	8	2	0			2
0	5	8	1	3			2
0	6	8	1	2			2
0	7	8	1	1			2
0	8	8	1	0			1

Prescale	Step	Count	Count/step (number of clock cycles from formula)	Divide reminder	Calculated q	Calculated r	Waveform result (number of clock cycles from formula)
			q				
0	1	10	10	0			10
0	2	10	5	0			5
0	3	10	3	1			4
0	4	10	2	2			3
0	5	10	2	0			2
0	6	10	1	4			2
0	7	10	1	3			2
0	8	10	1	2			2
0	9	10	1	1			2
0	10	10	1	0			1
0	11	10	0	10			1
0	12	10	0	10			1

Prescale	Step	Count	Count/step (number of clock cycles from formula)	Divide reminder	Calculated q	Calculated r	Waveform result (number of clock cycles from formula)
0	1	34	34	0			34
0	2	34	17	0			17
0	3	34	11	1			12

0	4	34	8	2			9
0	5	34	6	4			7
0	6	34	5	4			6
0	7	34	4	6			5
0	8	34	4	2			5
0	9	34	3	7			4
0	10	34	3	4			4
0	11	34	3	1			4
0	12	34	2	10			3
0	13	34	2	8			3
0	14	34	2	6			3
0	15	34	2	4			3
0	16	34	2	2			3
0	17	34	2	0			2
0	18	34	1	16			2
0	19	34	1	15			2
0	20	34	1	14			2
0	21	34	1	13			2
0	22	34	1	12			2
0	23	34	1	11			2
0	24	34	1	10			2
0	25	34	1	9			2
0	26	34	1	8			2
0	27	34	1	7			2
0	28	34	1	6			2
0	29	34	1	5			2
0	30	34	1	4			2
0	31	34	1	3			2
0	32	34	1	2			2
0	33	34	1	1			2
0	34	34	1	0			1
0	35	34	0	2			1
0	36	34	0	2			1
0	50	34	0	2			1
0	255	34	0	2			1

Prescale	Step	Count	Count/step (number of clock cycles from formula)	Divide reminder	Calculated q	Calculated r	Waveform result (number of clock cycles from formula)	Increase number of cycle
1	1	7					14	x2
2	1	7					21	x3
3	1	7					28	x4
4	1	7					35	x5
5	1	7					42	x6
6	1	7					49	x7
7	1	7					56	x8
8	1	7					63	x9
9	1	7					70	x10
10	1	7					77	x11
11	1	7					84	x12