

Timetable Clinic Handout

Formula cheat sheet:

Start time formula

This assumes that you have named a cell **start_time** on your spreadsheet. Only used once for the **first** cell of a train's schedule.

=TIME(HOUR(start_time),(MINUTE(start_time)+0),0)

Hour of start_time	Minute of start_time	Adjustment	No Seconds
-----------------------	-------------------------	------------	------------

Location time formula

This assumes that you have named a cell **start_time** on your spreadsheet. Used for each location of a train's schedule.

=TIME(HOUR(B10),MINUTE(B10),(SECOND(B10)+(INT((3600/B\$8)*1.5))))

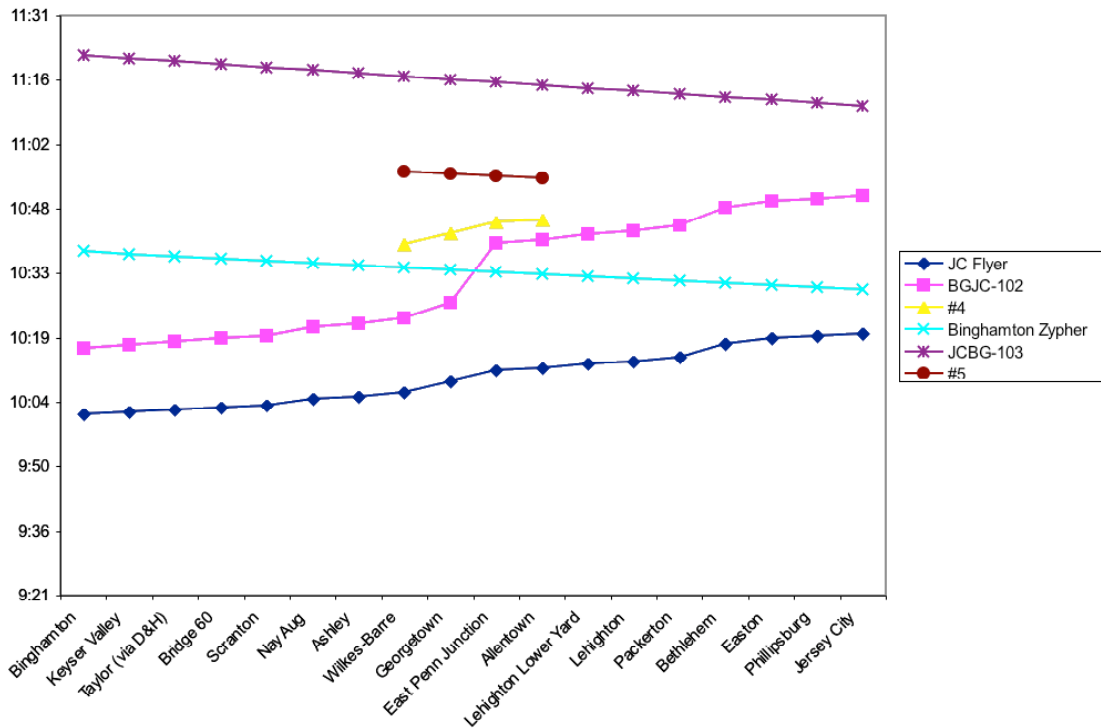
Hour of Cell B10	Minute of Cell B10	Second of Cell B10	3600 divided by Cell B8 (trains speed) (\$ forces it to always be row 8 no matter what column)	multiplied by scale miles or "smiles"
---------------------	-----------------------	-----------------------	-------------------------------------------------------------------------------------------------------------	------------------------------------------

The calculation (INT((3600/B\$8)*1.5))

3600 -> number of seconds in one hour
B\$8 -> train's speed in miles per hour
1.5 -> the number of scale miles "smiles" between the two locations
Scale Mile Lengths -> HO-6 ft, N-3 ft, O-1.5 feet
INT -> the Integer of the number (whole number)

3600/B\$8 -> the time it would take this train to move 1 mile in seconds
(3600/B\$8)*1.5 -> the number of seconds it would take this train to move 1.5 "smiles"
INT((3600/B\$8)*1.5) -> the whole number of seconds.

start time	EAST (read down v)				start time	WEST (read up ^)			
10:02					10:02				
number	JC Flyer	BGJC-102	#4		number	Binghamton Zypher	JCBG-103	#5	
type	passenger	mixed frght	passenger		type	passenger	mixed freight	pass	
speed	45	60	45	60	speed	45	60	45	60
Binghamton	10:02	10:02	10:17		Binghamton	10:13	10:38	11:22	
Keyser Valley	10:02	10:02	10:17		Keyser Valley	10:12	10:38	11:21	
Taylor (via D&H)	10:03	10:03	10:18		Taylor	10:12	10:37	11:21	
Bridge 60	10:04	10:03	10:19		Bridge 60	10:11	10:37	11:20	
Scranton	10:04	10:04	10:19		Scranton	10:10	10:36	11:19	
Nay Aug	10:06	10:05	10:21		Nay Aug	10:10	10:36	11:19	
Ashley	10:07	10:06	10:22		Ashley	10:09	10:35	11:18	
Wilkes-Barre	10:08	10:07	10:23	10:40	Wilkes-Barre	10:08	10:35	11:17	10:56
Georgetown	10:12	10:09	10:27	10:42	Georgetown	10:08	10:34	11:17	10:56
East Penn Junction	10:15	10:12	10:40	10:45	East Penn Junction	10:07	10:34	11:16	10:55
Allentown	10:16	10:12	10:41	10:45	Allentown	10:06	10:33	11:15	10:55
Lehighon Lower Yard	10:17	10:13	10:42		Lehighon Lower Yard	10:06	10:33	11:15	
Lehighon	10:18	10:14	10:43		Lehighon	10:05	10:32	11:14	
Packerton	10:19	10:15	10:44		Packerton	10:04	10:32	11:13	
Bethlehem	10:23	10:18	10:48		Bethlehem	10:04	10:31	11:13	
Easton	10:24	10:19	10:49		Easton	10:03	10:31	11:12	
Phillipsburg	10:25	10:19	10:50		Phillipsburg	10:02	10:30	11:11	
Jersey City	10:26	10:20	10:51		Jersey City	10:02	10:30	11:11	



Here's the final Timetable and Graph of the timetable. It has the conflicts adjusted as you can see from the large bump in the purple line (BGJC-102 schedule).

Copies of the excel files and the full clinic text can be found online at <http://www.gardenstatecentral.com/> Click on the Tips/Tricks button and choose the Timetable Clinic.

I'll also put the Garden State Central, Dave Albertson and Rick Spano schedules to give you some more ideas.