

Use the timetable below for this column.

### The Angle Line

Station	a.m.	a.m.	a.m.	a.m.
Obtuseland	7.45	8.05	8.25	8.45
Vertical Intersection	7.49	8.09	8.29	8.49
Alternate Junction	7.53	8.13	8.33	8.53
	dep.	7.54	8.14	8.34
Reflex Corner	7.56	8.16	8.36	8.56
Transversal Valley	8.02	8.22	8.42	9.02
Vertex Peak	8.07	8.27	8.47	9.07
Revolution Bend	8.10	8.30	8.50	9.10
Mathsville	arr.	8.15	8.35	8.55
	dep.	8.16	8.36	8.56
Adjacent Hill	8.18	8.38	8.58	9.18

- Will leaves home at 8.00 a.m. and arrives at Obtuseland Station at 8.08 a.m., find the time:
  - the first train arrives 8.25 a.m.
  - he could have left home to catch the same train 8.17 a.m.
  - he arrives at Mathsville 8.55 a.m.
  - he arrives at school, a 5 min walk from Mathsville Stn. 9.00 a.m.
  - the train travel takes 30 min
  - the entire trip takes 1 h
- At 8 a.m. Will tries for the earlier train. He can run to Obtuseland Stn. in 6 min or to Vertical Intersection in 9 min, which is successful? Vertical Intersection
- At what time would he arrive at school now? 8.40 a.m.
- Find the duration of the total trip to school. 40 min
- Will wants to see his friend Jerome. If Jerome catches the same train as Will at 8.27 a.m., at what station was he waiting? Vertex Peak
- Will wants to buy a hot chocolate at the Alternate Junction platform vending machine. If it is 9 s away how much time does the machine have to fill the cup? 42 s

The Symmetry Point Line connects to the Angle Line at Alternate Junction so both timetables will be used for this column

### The Symmetry Point Line

Station	a.m.	a.m.	a.m.	a.m.
Symmetry Point	7.25	7.45	7.55	8.25
Twodee Flats	7.28	...	7.58	8.28
Rhombus Slopes	7.31	...	8.01	8.31
Shopping Square	7.36	7.52	8.06	8.36
The Pentagon	7.40	7.56	8.10	8.40
Kite Bluff	7.44	...	8.14	8.44
Alternate Junction	7.50x	8.02x	8.20x	8.50x

... denotes doesn't stop at this station  
x denotes terminates here, change here for Angle Line

- Alicia's timetable was unreadable from rain damage. Complete the table for the Symmetry Point 7.55 and 8.25 a.m. services.
- Alicia lives at Symmetry Point and wants to catch the 8.14 a.m. Angle Line service which train should she catch? 7.45 a.m.
- Alicia attends the same school as Will. At what time would she arrive at Mathsville? 8.35 a.m.
- If it takes Alicia 5 min to walk to school at what time does she arrive at school? 8.40 a.m.
- If Alicia misses the 7.45 a.m. train will she be late if school starts at 9 a.m.? Circle: Yes  No
- Calculate Alicia's total travel time for both the 7.45 and 7.55 a.m. services if her house is 4 min away from Symmetry Point Stn. (assume no waiting at Symm Pt.)
 

7.45 a.m. train	7.55 a.m. train
<u>59 min</u>	<u>1 h 9 min</u>
- Ann lives at Isosceles Hill, an 8 min drive from Kite Bluff. If she wants to catch the 8.14 a.m. Angle Line train find the latest time she can arrive at Kite Bluff and the time she must leave home.
 

Latest Arrival	Time left home
<u>7.44 a.m.</u>	<u>7.36 a.m.</u>

On Saturdays one train operates the Symmetry Pt line. A return timetable is included.

### Symmetry Pt. → Alternate Jct

Station	a.m.	a.m.	p.m.	p.m.
Symmetry Point	10.30	11.30	12.30	1.30
Twodee Flats	10.33	11.33	12.33	1.33
Rhombus Slopes	10.36	11.36	12.36	1.36
Shopping Square	10.41	11.41	12.41	1.41
The Pentagon	10.45	11.45	12.45	1.45
Kite Bluff	10.49	11.49	12.49	1.49
Alternate Junction	10.55x	11.55x	12.55x	1.55x

### Alternate Jct → Symmetry Pt.

Station	a.m.	p.m.	p.m.	p.m.
Alternate Junction	11.00	12.00	1.00	2.00
Kite Bluff	11.06	12.06	1.06	2.06
The Pentagon	11.10	12.10	1.10	2.10
Shopping Square	11.14	12.14	1.14	2.14
Rhombus Slopes	11.19	12.19	1.19	2.19
Twodee Flats	11.22	12.22	1.22	2.22
Symmetry Point	11.25x	12.25x	1.25x	2.25x

x denotes terminates here

- Ian wants to catch a train from Twodee Flats to Shopping Square. Reaching the station at 10.50 a.m. how long does he wait? 43 min
- Does Ian see his train travelling in the opposite direction? If so, at what time? Circle:  Yes / No 11.22 a.m.
- If he spends 2 h at the shops (with walking time included), when does the next train arrive to return home and how long does he wait?
 

Time of train	Waiting time
<u>2.14 p.m.</u>	<u>33 min</u>
- How long is the train journey home? 8 min
- If it takes Ian 15 min to walk between home and the station, at what time did he leave home and arrive back? How much time has elapsed during his trip?
 

Left home	Arrived home
<u>10.35 a.m.</u>	<u>2.37 a.m.</u>
Elapsed time	
<u>4 h 2 min</u>	

