Example 7: What is the value of azimuth angle in 8th of May at 15:45?

@ 15:00

21 April   74.2

8 May   x

21   May   84.7

21May − 21April = 84.7- 74.2

21May − 8 May   84.7-x

30/13 = 10.5 /(84.7-x)

4.55 = 84.7 –x

X = 84.7-4.55= 80.15= Altitude @ 15:00 in 8th May

@ 16:00

21 April   84

8 May   x

21   May   92.9

21May – 21April = 92.9- 84

21May – 8 May   92.9-x

 30/13 = 8.9 /(92.9-x)

3.85 = 92.9 –x

X = 92.9-3.85= 89.05= Altitude @ 16:00 in 8th May

8th May

15:00   80.15

15:45   x

16:00   89.05

16:00 – 15:00 = 89.05- 80.15

16:00 – 15:45   89.05-x

60/15 = 8.9 /(89.05-x)

2.225 = 89.05 –x

X = 89.05-2.225= 86.825= Altitude @ 15:45 in 8th May

Example 8: What is the value of altitude angle in 2nd of October at 10:20

@ 10:00

21 Sep   47.3

2 Oct   x

21 Oct   38.7

$$\frac{21Oct - 21\,sep = 38.7 - 47.3}{21\,oct - 2\,oct \quad 38.7 - x}$$

30/19 = (-8.6) /(38.7-x)

(-5.45) = 38.7 –x

X = 38.7-(-5.45)= 44.15= Altitude @ 10:00 in 2nd Oct

@ 11:00

21 Sep   55

 2 Oct   x

21   Oct   45.1

21Oct – 21 sep= 45.1- 55
_____
21 oct – 2 oct   45.1-x

 30/19 = (-9.9) /(45.1-x)

(-6.27) = 45.1 –x

X = 45.1-(-6.27)= 51.37= Altitude @ 11:00 in 2nd Oct

@ 2nd Oct

10:00   44.15

10:20   x

11:00   51.37

$$11:00 - 10:00 = 51.37 - 44.15$$

$$11:00 = 10:20 \qquad 51.37 - x$$

$$60/40 = 7.22/(51.37 - x)$$

$$4.81 = 51.37 - x$$

$$X = 51.37 - 4.81 = 46.56 = \text{Altitude @ 10:20 in 2}^{nd}\text{ Oct}$$