

CE-103
Surveying
Lecture-5
Levels & Levelling



$$\text{Fall} = 8 - 3 = 5$$

8

$$\text{Rise} = 6 - 3 = 3$$

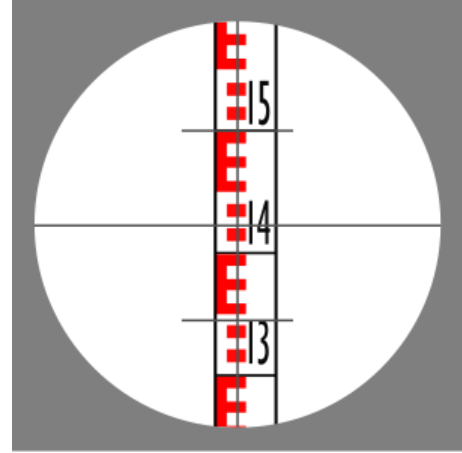
3

$$\text{Rise} = 7 - 6 = 1$$

6

$$\text{Fall} = 7 - 5 = 2$$

7



5



+250

+200

+150

+100

+50

+00

Md. Mehedi Hassan Bhuiyan (Lecturer)

Rise & Fall Method

Distance	Staff Readings			Difference		R.L.	Remarks
	Back	Inter	Fore	Rise	Fall		
00	5.42					100.00	B.M
50		7.24			1.82	98.18	
100		6.46		0.78		98.96	
150		5.38		1.08		100.04	
200		6.55			1.17	98.87	
250	8.78		6.92		0.37	98.50	
300		8.52		0.26		98.76	
350		6.24		2.28		101.04	
400		5.96		0.28		101.32	
450		6.35			0.39	100.93	
500			7.54		1.19	99.74	

Check: *Sum of Back Reading ~ Sum of Fore Reading* = $(5.42 + 8.78) \sim (6.92 + 7.54) = 0.26$

Total Rise ~ Total Fall = $4.68 \sim 4.96 = 0.26$

Last R.L. ~ First R.L. = $99.74 \sim 100.00 = 0.26$

Md. Mehedi Hassan Bhuiyan (Lecturer)

Thank You

Stay Safe

Stay Aware