Mansoura university — first tearm exam
Depart ment of Architecture — Time: 3 hours
Exam: surveying — Date 2013/2014

ex(4) The following readings were taken in leveling work every 50 ms at the top of pegs

(الرقم) : 0.82 , 0.68 , 0.47 , 0.92 , 0.88 , 0.60 , 0.52 , 0.98, 0.87,0.78 , 0.61

, 0.12 , 0.68 , and 0.52 The level shifted after the fourth , eighth reading and after tenth point . The reduced level of the top of the seven peg was 20.00 m

1 – In complete table find the reduced levels of the tops of all pegs and check

Your results

2 – Draw the longitudinal section passing through the tops of the pegs with

Horizontal scale 1:200 and vertical scale 1:20 and join the gradient line

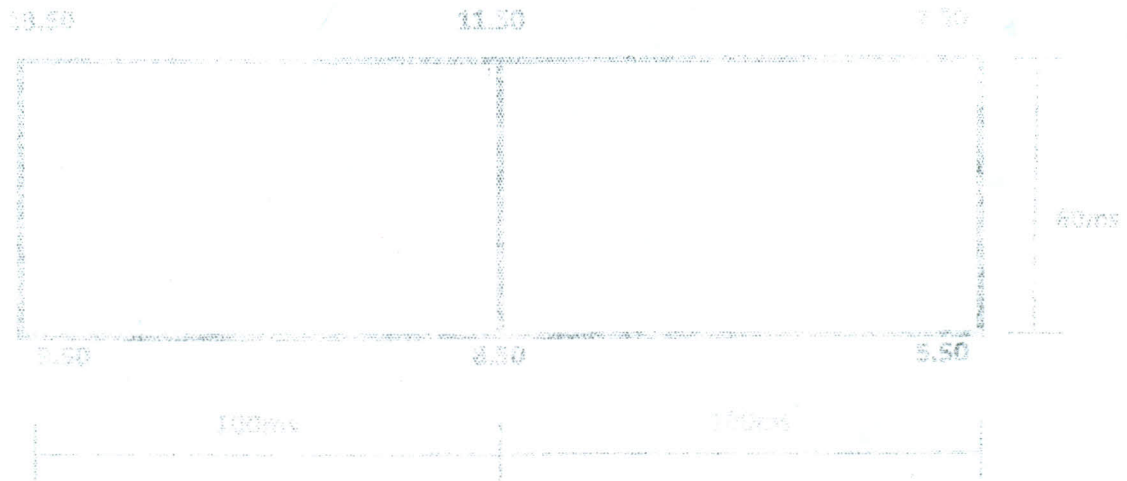
Between the first and last point

Ex(5) If the reduced bearing of line AB, measured in the year 1974 was N 45° 30' w

And the angle of declination was 3°weast. find the true and magnetic bearing

Of line AB in the year 2010 if the rate of change angle of declination 10 east

Ex(6) For the shown figure calculate the cut and fill quantities of reduced level of 2.5 ms



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ex(1) The following readings were taken for anticlockwise closed traverse ABCDA

Point	Horizontal angle	Line	Distance (m)
A	132° 15' 30 "	A B	0638.00
B	126° 12' 55"	B C	1576.0 0
C	069° 41' 45 "	C D	3824.10
D	031° 50' 30 "	D A	3134.00

Line AB refers to the north exactly and the coordinates of point A is (4000 E , 5000 N)

It is required to: Compute the uncorrected coordinates

(الاحداثيات الغير مصححه) (of all the points of the traverse

Ex(2)From point O the points A, B and C have been observed by an instrument having Constants (100 , 0).The observations are as follows

Instrument Point	St. ff point	Bearings	Vertical angles	Stadia readings
O	A	00° 00'	Zero	1.10, 2.10, 3.10
	B	45° 00'	Zero	0.60, 1.60, 2.60
	C	90° 00'	Zero	1.45, 2.45, 3.45

It is required to find :

1-calculate the distances from point o to points A,B,C and their levels

2-calculate the gradient between the two points (A and B) and (B and C)

Ex(3) width of the new road equals 10.0m, starts from chainage (0.00) and have level 12.50 m(+) Down slope 1:1000 and side slope (2) horizontal and (1) vertical

.If the ground taken when constructing the new road

Chainage(m)	0.00	100	200	300	400	500	600
Reduced level (m)	12.50	6.50	5.75	6.30	8.75	6.70	9.60

1-Draw the longitudinal section for the ground and road with horizontal scale 1:2000 and vertical scale 1:100

2-Determine the quantities of fill necessary to construct this road

(بفرض 4م)