What is planimetic map and topographic map?

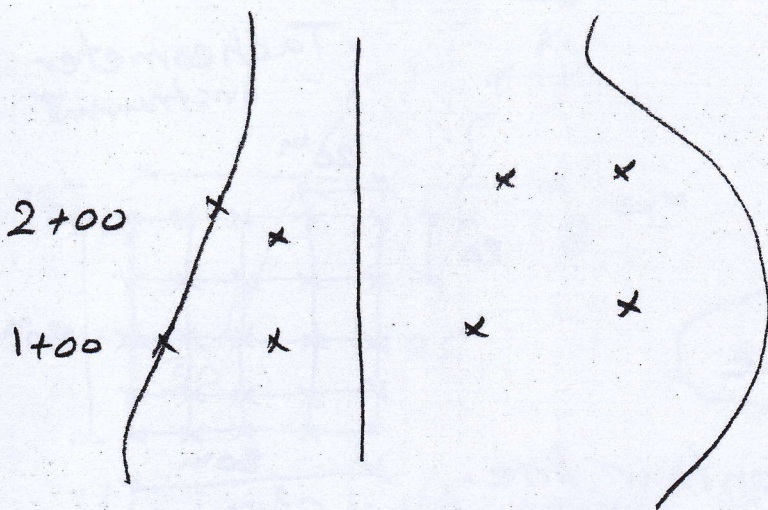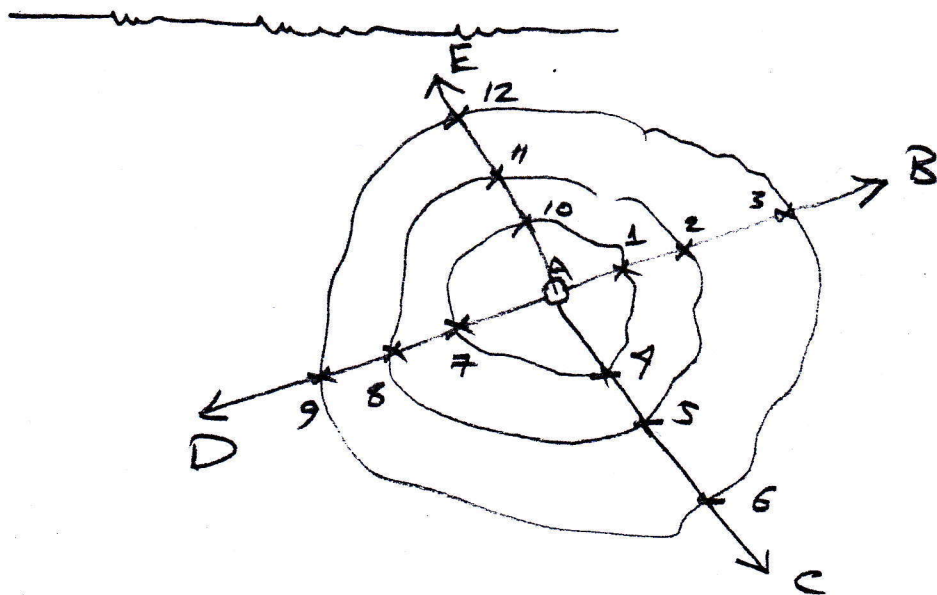## Method of contouring

1. Cross-section method
2. Direct location method
3. Control point method.
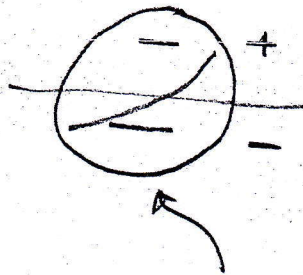4. Grid method.

1. Cross-section method

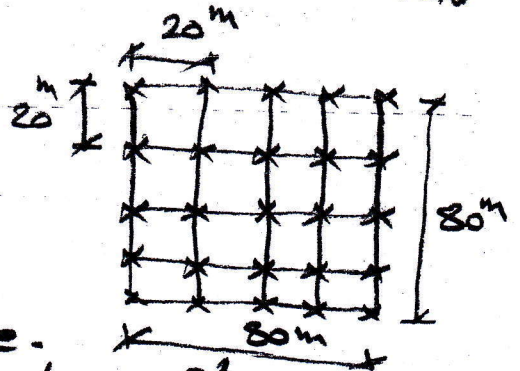| station	L		₵	R	
1+00	$\dfrac{35.8}{-70}$,	$\dfrac{36.2}{-35}$,	$\dfrac{36.1}{0}$	$\dfrac{36.1}{35}$,	$\dfrac{35.0}{70}$
2+00	$\dfrac{32.8}{-70}$,	$\dfrac{32.6}{-35}$	$\dfrac{35.6}{0}$	$\dfrac{33.0}{35}$,	$\dfrac{32.7}{70}$

2. Direct Location method

3. Control point method
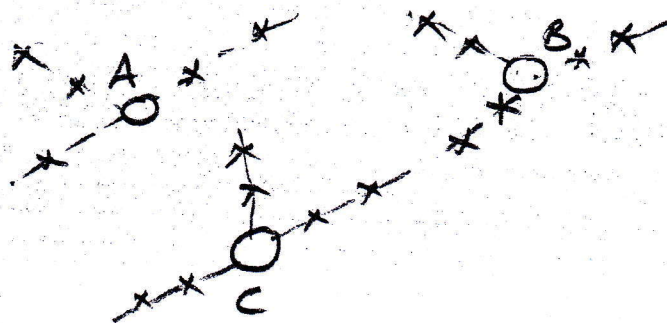
Tacheometer instrument

4. Grid method

$$k = \frac{S}{\Delta E} * \Delta e$$

k : Location of contour line.

δ = Distance between two points on plan.

ΔE : Difference level between two points.

De : Difference level between least elevation and adjacent to contour line.

Example/ Elevation of point A is (32m) and the elevation of point B is (24m), distance between them (42mm). Find number of Contour lines between the points and its location while contour interval = 5m.
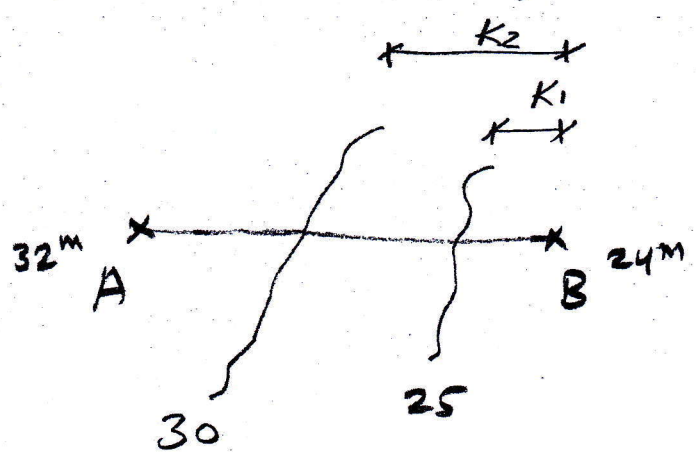
Solution

number of contour lines = $\dfrac{\text{Difference between elevations}}{\text{Contour Interval}}$

$$= \dfrac{8}{5} = 1.6 \approx 2.0$$

$K_1 = \dfrac{S}{\Delta E} * \Delta e$ (Location from B)

$$= \dfrac{42^{mm}}{(32-24)m} * (25-24)m = 5.25\,mm$$

$K_2 = \dfrac{42\,mm}{(32-24)m} * (30-24) = 31.5\,mm$

H.W) check the result in this example if the location of contour line taken from A ?