

(4) Concerning the traverse shown diagrammatically below; you are required to -

- (i) close the traverse; and
- (ii) calculate the area of polygon ABCDE by the "double-longitude" method.

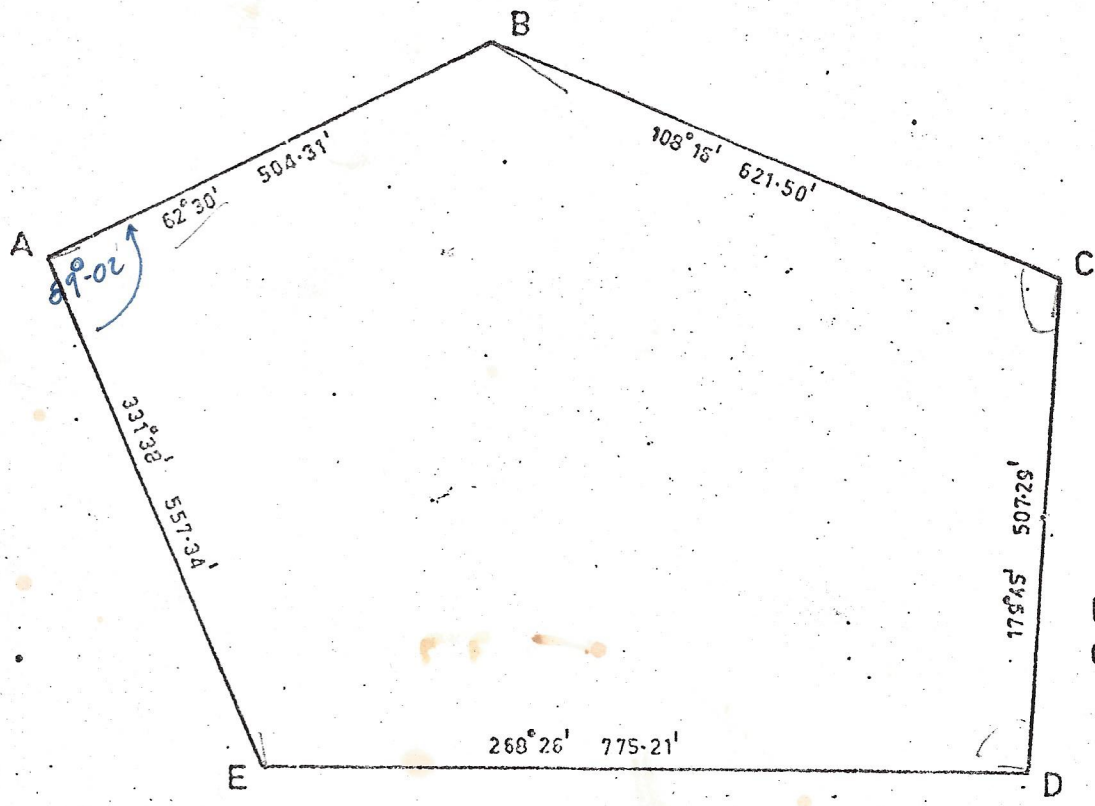


FIGURE 1
QUESTION 4

(5) A fault plane having a true dip of 75° on bearing 195° intersects a uniformly dipping strata, which in turn has a true dip of 17° on bearing 108° . Calculate the bearing and dip of the fault-strata intersection line.

(6) The undermentioned observations were taken with a theodolite from one station of a tachymetric survey, to a staff held vertically on two points A and B:

	Bearing	Ver. Angle	Centre Line	Stadia Lines	
Point A	$274^\circ 15'$	-7°	4.16	4.84	3.48
Point B	$320^\circ 38'$	$+8^\circ$	5.07	6.18	3.95

Find the horizontal distance and the gradient between points A and B.