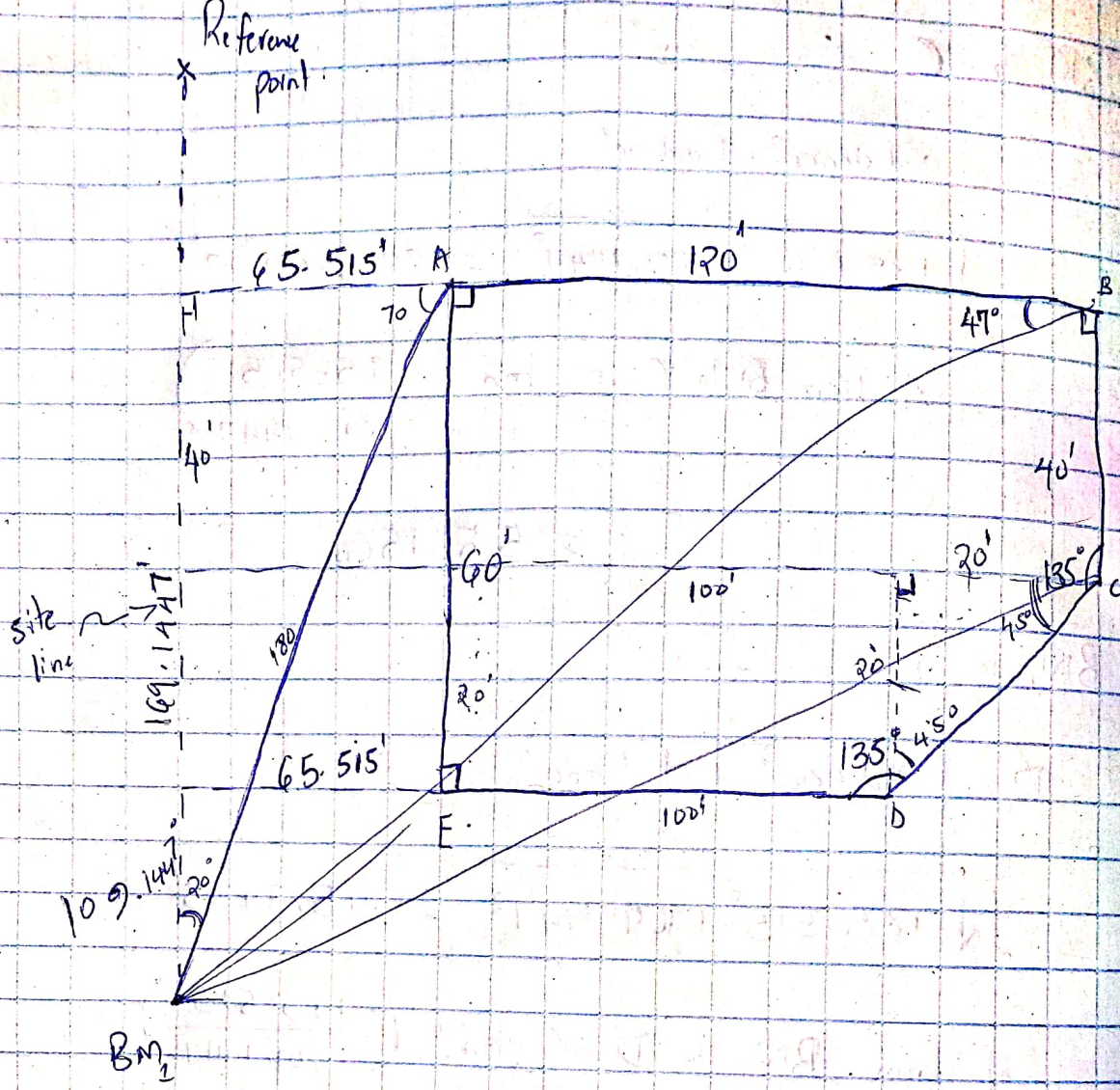

Provide Bearing & distance from :- ~~BM1 to~~

a) BM_1 to B.

$$B = \sqrt{x\ \text{distance}^2\ (E/W)^2 + y\ \text{distance}^2\ (N/S)}$$

$$= \sqrt{185.515^2 + 169.1447^2} = 251.0493'$$

$\measuredangle$ from BM_1 to B $= \tan^{-1}\left(\frac{x\text{-dist}}{y\text{-dist}}\right)$

$$= \tan^{-1}\left(\frac{185.515}{169.1447}\right) = 47.6428^\circ$$

b) BM, to C

C = $\sqrt{\text{X-distance}^2 + \text{Y-distance}^2}$

= $\sqrt{185.515^2 + 129.1447^2}$ = 226.0402'

∠ from BM, to C = $\tan^{-1}\left(\frac{185.515}{129.1447}\right)$

= 55.1566°

c) BM, to D.

D = $\sqrt{\text{X-distance}^2 + \text{Y-distance}^2}$

= $\sqrt{185.515^2 + 109.1447^2}$ = 215.2403'

∠ from BM, to D = $\tan^{-1}\left(\frac{185.515}{109.1447}\right)$

= 59.5303°

d) BM, to E

E = $\sqrt{\text{X-distance}^2 + \text{Y-distance}^2}$

= $\sqrt{65.515^2 + 109.1447^2}$ = 127.298'

∠ from BM, to E = $\tan^{-1}\left(\frac{65.515}{109.1447}\right)$ = 30.975°