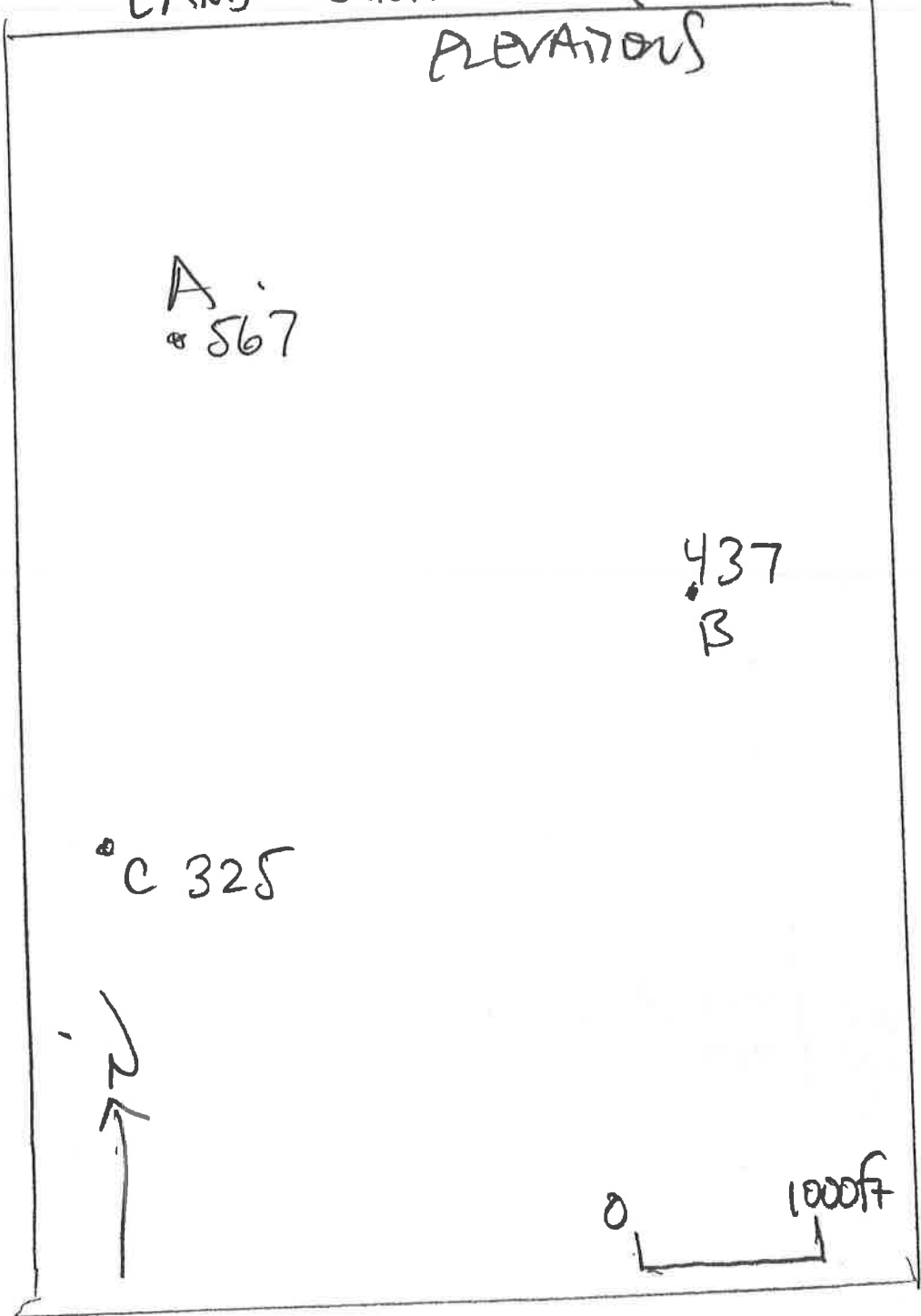


IN-CLASS 3-PT PROBLEM SPRING 2016

LAND SURFACE  
ELEVATIONS



# IN-CLASS 3-PT PROBLEM

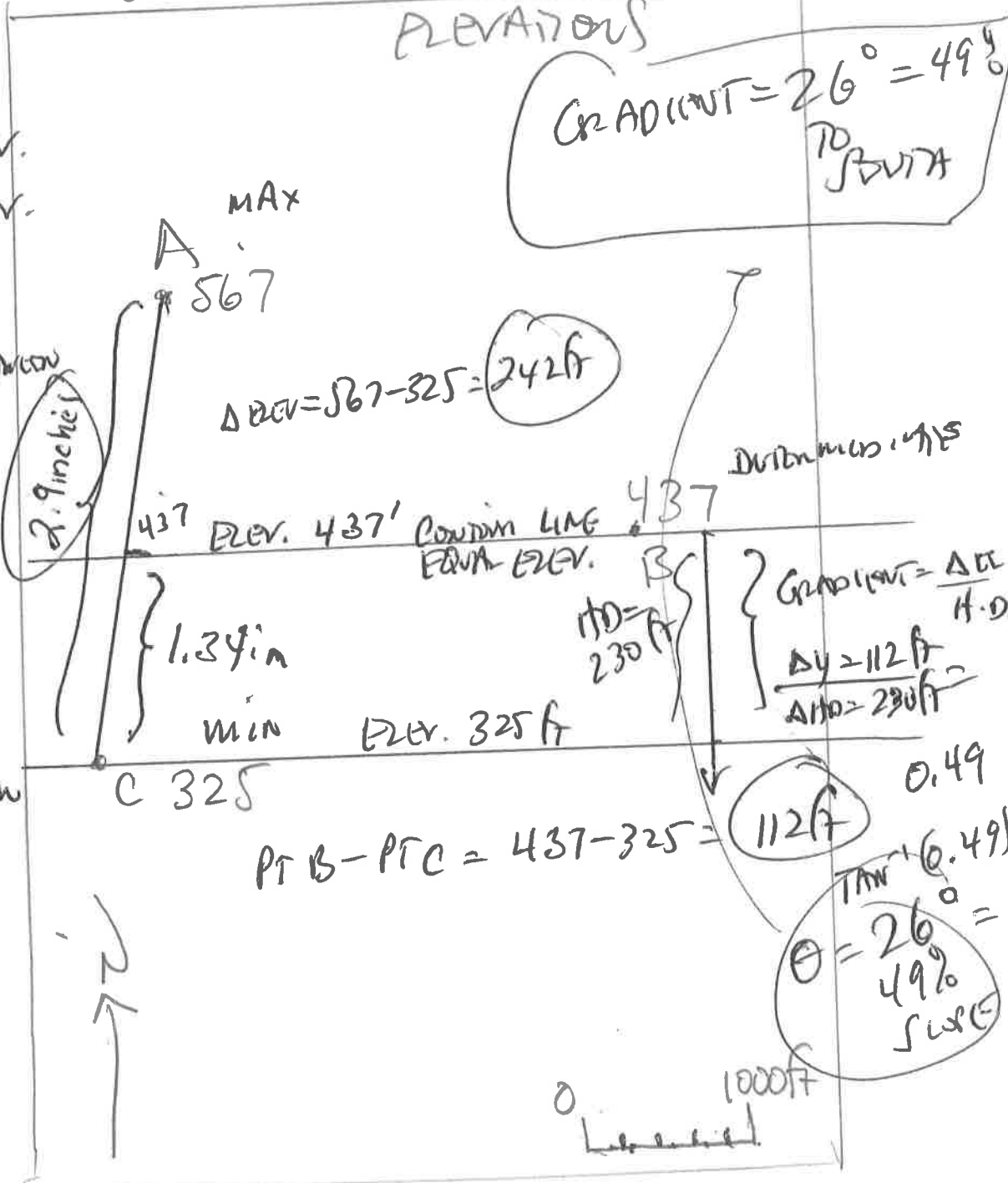
Key

LAND SURFACE

ELEVATIONS

GRADIENT =  $26^\circ = 49\%$   
TO POINTS

- ① Find MAX. ELEV.
- ② Find MIN. ELEV.
- ③ Draw LINE
- ④ Measure MAP DISTANCE BETWEEN POINTS
- ⑤ Determine RELIEF
- ⑥ Set SCALE
- ⑦ Determine MID-LINE POSITION OF 3-PT. ELEVATIONS
- ⑧ Calculate SLOPE or GRADIENT



$\frac{242 \text{ FT}}{2.9 \text{ in}}$

$Ac \left( \frac{2.9 \text{ in}}{242 \text{ FT}} \right) 112 \text{ FT BC} = 1.34 \text{ in TO POINT OF PT. C AND B LINE AC}$

$\theta = 26^\circ = 49\% \text{ SLOPE}$   
 $\tan^{-1}(0.49)$

GRADIENT =  $\frac{\Delta V}{H.O.}$   
 $\frac{\Delta V = 112 \text{ FT}}{H.O. = 230 \text{ FT}} = 0.49$

