

# Assignment - 3

Ganesh Yadav  
MD/2020/712

Download all and latex-tikz codes from

svn co <https://github.com/Ganeshyadav712/Assignment-3.git>

Question taken from

[https://github.com/gadepall/ncert/blob/main/linalg/construction/gvv\\_ncert\\_constr.pdf](https://github.com/gadepall/ncert/blob/main/linalg/construction/gvv_ncert_constr.pdf) – example 2.9

## 1 QUESTION

Can you construct the quadrilateral PLAN if  $PL = 6$ ,  $LA = 9.5$ ,  $\angle P = 75^\circ$ ,  $\angle L = 150^\circ$  and  $\angle A = 140^\circ$  ?

## 2 SOLUTION

The given information can be expressed as

$$\angle P = 75^\circ \quad (1)$$

$$\angle L = 150^\circ \quad (2)$$

$$\angle A = 140^\circ \quad (3)$$

$$\|P - L\| = 6 \quad (4)$$

$$\|L - A\| = 9.5 \quad (5)$$

As we know the sum of the measures of the four angles of a quadrilateral is  $360^\circ$

but here,

$$\angle P + \angle L + \angle A = 365^\circ$$

hence it is not possible to construct the quadrilateral with above data.