# Assignment 1

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Download all python codes from

https://github.com/KeshavRoy/Distance

and latex-tikz codes from

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## 1 Problem

(1.3) Find the distance between the following pairs of points:
(-3 -2) and (-6 7) the axes being inclined at 60 degree

## 2 Solution

The distance b/w two points (x1, y1) and (x2, y2) is given as :

$$\sqrt{(X2-X1)^2+(Y2-Y1)^2+2(X2-X1)(Y2-Y1)CO} \tag{2.0.1}$$

Given coordinates
(-3 -2) (-6 7) and $\theta = 60$

$$\sqrt{(-3-(-6))^2+(-2-7)^2+2(-3-6-(6))(-2-7)c} \tag{2.0.2}$$

$$\sqrt{3^2+9^2+2*3-9\frac{1}{2}} \tag{2.0.3}$$

$$\sqrt{9+81-27} \tag{2.0.4}$$

$$\sqrt{63} \tag{2.0.5}$$

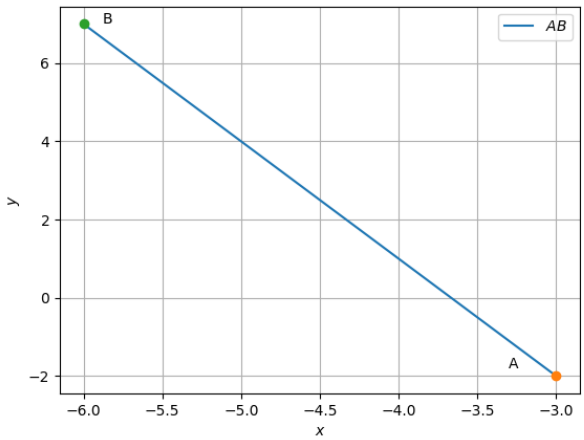


Fig. 0: triangle