#### 1

# Assignment 1

## Ayush Kumar Singh - AI20BTECH11028

Download all python codes from

https://github.com/ayush-2321/EE3900/new/main

and latex-tikz codes from

https://github.com/ayush-2321/EE3900/new/main

### **RAMSEY 1.18**

Find the co ordinates of the points which divides the joining of two points  $\binom{2}{3}$ ,  $\binom{-4}{5}$  externally in the ratio 2:3 and also externally in the ratio 3:2

## 1 solution

Let A be the point which divides the join in the ration 3:2 externally and B be the point dividing the join in the ratio 2:3 externally

$$A = \frac{3\binom{-4}{5} - 2\binom{2}{3}}{1} \tag{1.0.1}$$

$$A = \begin{pmatrix} -18\\9 \end{pmatrix} \tag{1.0.2}$$

$$B = \frac{2\binom{-4}{5} - 3\binom{2}{3}}{-1} \tag{1.0.3}$$

$$B = \begin{pmatrix} 14\\-1 \end{pmatrix} \tag{1.0.4}$$

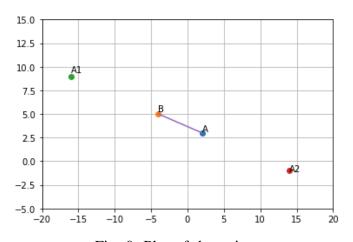


Fig. 0: Plot of the points