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Assignment 1

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Download all python codes from

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

and latex-tikz codes from

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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

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

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

$$\mathbf{B} = \frac{2\begin{pmatrix} -4\\5 \end{pmatrix} - 3\begin{pmatrix} 2\\3 \end{pmatrix}}{-1} \tag{1.0.3}$$

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

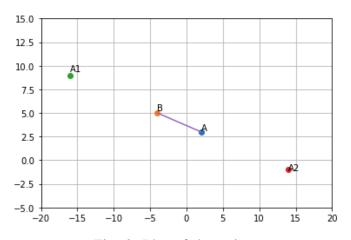


Fig. 0: Plot of the points