Assignment No.6

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Download latex-tikz codes from

https://github.com/ShishirNIPER/Assignment6/blob/main/main.tex

Download python codes from

https://github.com/ShishirNIPER/Assign6/blob/main/Assign.ipynb

Question taken from

Inequalities , exercises 2.9

1 Question No 2.9

Solve

$$\frac{5-2x}{3} \leq \frac{x}{6} - 5$$

2 Solution

From the given information,

$$\frac{5-2x}{3} \leq \frac{x}{6} - 5 \tag{2.0.1}$$

$$6x\frac{5-2x}{3} \leq 6\frac{x}{6} - 5 \tag{2.0.2}$$

$$2x5 - 2x \leq 6x - 5 \tag{2.0.3}$$

$$10 - 4x \leq x - 5 \tag{2.0.4}$$

$$10 \leq x + 4x - 5 \tag{2.0.5}$$

$$10 + 5 \leq x = 4x \tag{2.0.6}$$

$$15 \leq 5x \tag{2.0.7}$$

$$x \leq 3 \tag{2.0.8}$$

$$x \ \epsilon \ (+3, -\infty) \tag{2.0.9}$$

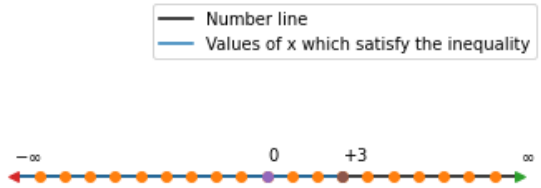

Fig. 2.1: Number line inequality graph