

$$\text{Q1. } \frac{4}{x+1} \leq 3 \leq \frac{6}{x+1}$$

$$\text{Sol. } \frac{4}{x+1} \leq 3 \leq \frac{6}{x+1}, (x > 0) \Rightarrow \frac{4}{x+1} \leq 3 \text{ and } 3 \leq \frac{6}{x+1}, x > 0$$

$$\Rightarrow 4 \leq 3(x+1) \text{ and } 3(x+1) \leq 6, x > 0 \Rightarrow 1/3 \leq x \text{ and } x \leq 1, x > 0$$

$$\Rightarrow 1/3 \leq x \leq 1$$