

Q6. $4x + 3 \geq 2x + 17$, $3x - 5 < -2$.

Sol: We have $4x + 3 \geq 2x + 17$

$$\Rightarrow 4x - 2x \geq 17 - 3 \Rightarrow 2x \geq 14$$

$$\Rightarrow x \geq 7 \tag{i}$$

Also, we have $3x - 5 < -2$

$$\Rightarrow 3x < -2 + 5 \Rightarrow 3x < 3$$

$$\Rightarrow x < 1 \tag{ii}$$

From (i) and (ii), no value of x is possible.