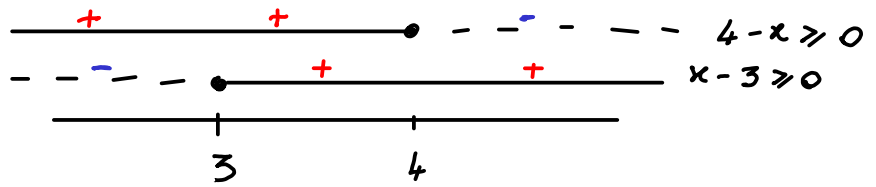


$$|x-3| + |4-x| > 2$$

$$\bullet x-3 \geq 0 \rightarrow x \geq 3$$

$$\bullet 4-x \geq 0 \rightarrow x \leq 4$$

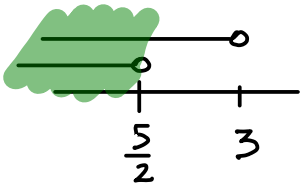


$$\left\{ \begin{array}{l} x < 3 \\ -(x-3) + (4-x) > 2 \end{array} \right. \vee \left\{ \begin{array}{l} 3 \leq x < 4 \\ (x-3) + (4-x) > 2 \end{array} \right. \vee \left\{ \begin{array}{l} x \geq 4 \\ (x-3) - (4-x) > 2 \end{array} \right.$$

$$\left\{ \begin{array}{l} x < 3 \\ -x+3+4-x > 2 \end{array} \right. \vee \left\{ \begin{array}{l} 3 \leq x < 4 \\ x-3+4-x > 2 \end{array} \right. \vee \left\{ \begin{array}{l} x \geq 4 \\ x-3-4+x > 2 \end{array} \right.$$

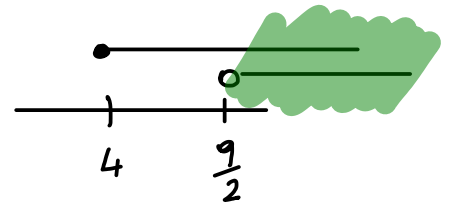
$$\left\{ \begin{array}{l} x < 3 \\ -2x > -5 \end{array} \right. \vee \left\{ \begin{array}{l} 3 \leq x < 4 \\ 1 > 2 \end{array} \right. \vee \left\{ \begin{array}{l} x \geq 4 \\ 2x > 9 \end{array} \right.$$

$$\left\{ \begin{array}{l} x < 3 \\ x < \frac{5}{2} \end{array} \right. \vee \left\{ \begin{array}{l} 3 \leq x < 4 \\ \nexists x \in \mathbb{R} \end{array} \right. \vee \left\{ \begin{array}{l} x \geq 4 \\ x > \frac{9}{2} \end{array} \right.$$



$$x < \frac{5}{2}$$

$$\vee \nexists x \in \mathbb{R}$$



$$x > \frac{9}{2}$$

$$\boxed{x < \frac{5}{2} \vee x > \frac{9}{2}}$$