

6. Solve the inequality $-3 \leq 10 - 10x \leq 3$

express your solution sets using interval notation.

$$\left(\frac{7}{10}, \frac{13}{10} \right)$$

$$\left(-\infty, \frac{7}{10} \right) \cup \left(\frac{13}{10}, +\infty \right)$$

$$\left[\frac{7}{10}, \frac{13}{10} \right]$$

$$\left(-\infty, \frac{7}{10} \right] \cup \left[\frac{13}{10}, +\infty \right)$$

Solution

Intervals

Solve:

$$|10 - 10x| + 4 \leq 7$$

$$|10 - 10x| \leq 3$$

$$-3 \leq 10 - 10x \leq 3$$

$$-3 - (10) \leq -10x \leq 3 - (10)$$

$$-13 \leq -10x \leq -7$$

Divide each side by -10 and flip the inequalities

$$|10 - 10x| + 4 \leq 7$$

$$\frac{7}{10} \leq x \leq \frac{13}{10}$$