

5. Solve the inequality $-6 < 3 - 3x < 6$
express your solution sets using interval notation.

$$[-1, 3]$$

$$(-\infty, -1) \cup (3, +\infty)$$

$$(-1, 3)$$

$$(-\infty, -1] \cup [3, +\infty)$$

Solution

Intervals

Solve:

$$|3 - 3x| + 3 < 9$$

$$|3 - 3x| < 6$$

$$-6 < 3 - 3x < 6$$

$$-6 - (3) < -3x < 6 - (3)$$

$$-9 < -3x < 3$$

Divide each side by -3 and flip the inequalities

$$|3 - 3x| + 3 < 9$$

$$-1 < x < 3$$