

1. Solve the inequality $-8 < 7 - 7x < 8$
express your solution sets using interval notation.

$$\left[-\frac{1}{7}, \frac{15}{7}\right]$$

$$\left(-\infty, -\frac{1}{7}\right) \cup \left(\frac{15}{7}, +\infty\right)$$

$$\left(-\frac{1}{7}, \frac{15}{7}\right)$$

$$\left(-\infty, -\frac{1}{7}\right] \cup \left[\frac{15}{7}, +\infty\right)$$

Solution

Intervals

Solve:

$$|7 - 7x| + 1 < 9$$

$$|7 - 7x| < 8$$

$$-8 < 7 - 7x < 8$$

$$-8 - (7) < -7x < 8 - (7)$$

$$-15 < -7x < 1$$

Divide each side by -7 and flip the inequalities

$$|7 - 7x| + 1 < 9$$



$$-\frac{1}{7} < x < \frac{15}{7}$$