

6. Solve the inequalities  $|10x + 9| + 3 \leq 6$   
express your solution sets using interval notation.

$$\left(-\frac{6}{5}, -\frac{3}{5}\right)$$

$$\left(-\infty, -\frac{6}{5}\right) \cup \left(-\frac{3}{5}, +\infty\right)$$

$$\left[-\frac{6}{5}, -\frac{3}{5}\right]$$

$$\left(-\infty, -\frac{6}{5}\right] \cup \left[-\frac{3}{5}, +\infty\right)$$

**Solution**

**Intervals**

Solve:

$$|10x + 9| + 3 \leq 6$$

$$|10x + 9| \leq 3$$

$$-3 \leq 10x + 9 \leq 3$$

$$-3 - (9) \leq 10x \leq 3 - (9)$$

$$-12 \leq 10x \leq -6$$

Divide each side by 10

$$|10x + 9| + 3 \leq 6$$

-1.2

-1.0

-0.8

-0.6

$$-\frac{6}{5} \leq x \leq -\frac{3}{5}$$