

7. Solve the inequalities  $9 < 2 + 7|x|$   
express your solution sets using interval notation.

$(-1, 1)$

$[-1, 1]$

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

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

**Solution**

**Intervals**

Solve:

$$9 < 7|x| + 2$$

$$7 < 7|x|$$

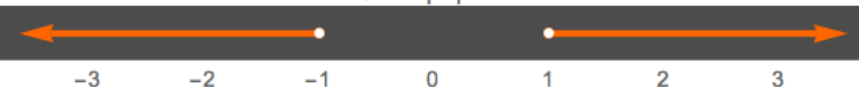
$$7 < 7x \text{ or } 7x < -7$$

$$7 - (0) < 7x \text{ or } 7x < -7 - (0)$$

$$7 < 7x \text{ or } 7x < -7$$

Divide each side by 7

$$9 < 7|x| + 2$$



$$x < -1 \text{ or } x > 1$$