2. Solve the inequalities $|5-2x|+1<8$
express your solution sets using interval notation.

$[-1,6]$

$(-\infty,-1)\cup(6,+\infty)$

$(-1,6)$

$(-\infty,-1]\cup[6,+\infty)$

Solution

Intervals

Solve:

$|5-2x|+1<8$

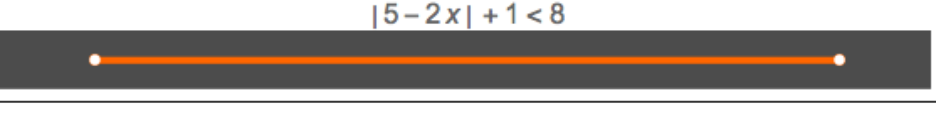
$|5-2x|<7$

$-7<5-2x<7$

$-7-(5)<-2x<7-(5)$

$-12<-2x<2$

Divide each side by -2 and flip the inequalities



$-1<x<6$