9. Solve the inequalitie $-6<5-2x<6$

express your solution sets using interval notation.

$[-\frac{1}{2},\frac{11}{2}]$

$(-\infty,-\frac{1}{2})\cup(\frac{11}{2},+\infty)$

$(-\frac{1}{2},\frac{11}{2})$

$(-\infty,-\frac{1}{2}]\cup[\frac{11}{2},+\infty)$

Solution

Intervals

Solve:

$|5-2x|+1<7$

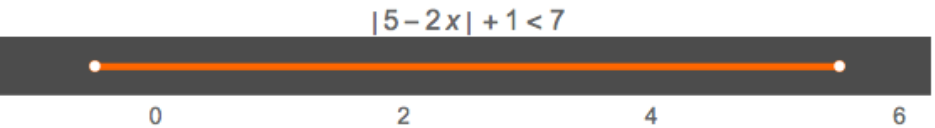
$|5-2x|<6$

$-6<5-2x<6$

$-6-(5)<-2x<6-(5)$

$-11<-2x<1$

Divide each side by -2 and flip the inequalities



$-\frac{1}{2}<x<\frac{11}{2}$