7. Solve the inequalitie $-9<1-8x<9$
express your solution sets using interval notation.

$[-1, \frac{5}{4}]$

$(-\infty, -1) \cup (\frac{5}{4}, +\infty)$

$(-1, \frac{5}{4})$

$(-\infty, -1] \cup [\frac{5}{4}, +\infty)$

Solution

Intervals

Solve:

$|1-8x|+1<10$

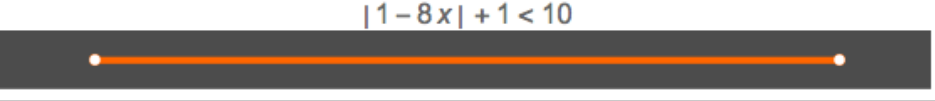
$|1-8x|<9$

$-9<1-8x<9$

$-9-(1)<-8x<9-(1)$

$-10<-8x<8$

Divide each side by -8 and flip the inequalities



$-1 < x < \frac{5}{4}$