2. Solve the inequalitie $-4<5-9x<4$
express your solution sets using interval notation.

$[\frac{1}{9},1]$

$(-\infty,\frac{1}{9})\cup(1,+\infty)$

$(\frac{1}{9},1)$

$(-\infty,\frac{1}{9}]\cup[1,+\infty)$

Solution

Intervals

Solve:

$|5-9x|+2<6$

$|5-9x|<4$

$-4<5-9x<4$

$-4-(5)<-9x<4-(5)$

$-9<-9x<-1$

Divide each side by -9 and flip the inequalities

$\frac{1}{9}<x<1$