3. Solve the inequalitie $-9<4-3x<9$

express your solution sets using interval notation.

$[-\frac{5}{3},\frac{13}{3}]$

$(-\infty,-\frac{5}{3})\cup(\frac{13}{3},+\infty)$

$(-\frac{5}{3},\frac{13}{3})$

$(-\infty,-\frac{5}{3}]\cup[\frac{13}{3},+\infty)$

Solution

Intervals

Solve:

$|4-3x|+1<10$

$|4-3x|<9$

$-9<4-3x<9$

$-9-(4)<-3x<9-(4)$

$-13<-3x<5$

Divide each side by -3 and flip the inequalities

$|4-3x|+1<10$

$-\frac{5}{3}<x<\frac{13}{3}$