4. Solve the inequalitie $-8<9-5x<8$
express your solution sets using interval notation.

$[\frac{1}{5},\frac{17}{5}]$

$(-\infty,\frac{1}{5})\cup(\frac{17}{5},+\infty)$

$(\frac{1}{5},\frac{17}{5})$

$(-\infty,\frac{1}{5}]\cup[\frac{17}{5},+\infty)$

Solution

Intervals

Solve:

$|9-5x|+2<10$

$|9-5x|<8$

$-8<9-5x<8$

$-8-(9)<-5x<8-(9)$

$-17<-5x<-1$

Divide each side by -5 and flip the inequalities

$|9-5x|+2<10$

$\frac{1}{5}<x<\frac{17}{5}$