9. Solve the inequalities $|9x - 10| + 4 < 9$
express your solution sets using interval notation.

$[\frac{5}{9}, \frac{5}{3}]$

$(-\infty, \frac{5}{9}) \cup (\frac{5}{3}, +\infty)$

$(\frac{5}{9}, \frac{5}{3})$

$(-\infty, \frac{5}{9}] \cup [\frac{5}{3}, +\infty)$

Solution

Intervals

Solve:

$|9x - 10| + 4 < 9$

$|9x - 10| < 5$

$-5 < 9x - 10 < 5$

$-5 - (-10) < 9x < 5 - (-10)$

$5 < 9x < 15$

Divide each side by 9

$\frac{5}{9} < x < \frac{5}{3}$