7. Solve the inequalitie $-9 < 6x - 6 < 9$
express your solution sets using interval notation.

$[-\frac{1}{2}, \frac{5}{2}]$

$(-\infty, -\frac{1}{2}) \cup (\frac{5}{2}, +\infty)$

$(-\frac{1}{2}, \frac{5}{2})$

$(-\infty, -\frac{1}{2}] \cup [\frac{5}{2}, +\infty)$

Solution

Intervals

Solve:

$|6x - 6| + 1 < 10$

$|6x - 6| < 9$

$-9 < 6x - 6 < 9$

$-9 - (-6) < 6x < 9 - (-6)$

$-3 < 6x < 15$

Divide each side by 6

$|6x - 6| + 1 < 10$

$-\frac{1}{2} < x < \frac{5}{2}$