7. Solve the inequalities $|6x+2|+1 \leq 6$
express your solution sets using interval notation.

$(-\frac{7}{6}, \frac{1}{2})$

$(-\infty, -\frac{7}{6}) \cup (\frac{1}{2}, +\infty)$

$[-\frac{7}{6}, \frac{1}{2}]$

$(-\infty, -\frac{7}{6}] \cup [\frac{1}{2}, +\infty)$

Solution

Intervals

Solve:

$|6x+2|+1 \leq 6$

$|6x+2| \leq 5$

$-5 \leqslant 6x+2 \leqslant 5$

$-5-(2) \leqslant 6x \leqslant 5-(2)$

$-7 \leqslant 6x \leqslant 3$

Divide each side by 6

$-\frac{7}{6} \leq x \leq \frac{1}{2}$