6. Solve the inequalitie $-3 \leqslant 10x - 4 \leqslant 3$
express your solution sets using interval notation.

$\left(\frac{1}{10}, \frac{7}{10}\right)$

$(-\infty, \frac{1}{10}) \cup (\frac{7}{10}, +\infty)$

$\left[\frac{1}{10}, \frac{7}{10}\right]$

$(-\infty, \frac{1}{10}] \cup [\frac{7}{10}, +\infty)$

Solution

Intervals

Solve:

$|10x - 4| + 3 \leq 6$

$|10x - 4| \leq 3$

$-3 \leqslant 10x - 4 \leqslant 3$

$-3 - (-4) \leqslant 10x \leqslant 3 - (-4)$

$1 \leqslant 10x \leqslant 7$

Divide each side by 10

$|10x - 4| + 3 \leq 6$

$\frac{1}{10} \leq x \leq \frac{7}{10}$