6. Solve the inequalities $|1-6x|+4 \le 10$
express your solution sets using interval notation.

$(-\frac{5}{6}, \frac{7}{6})$

$(-\infty, -\frac{5}{6}) \cup (\frac{7}{6}, +\infty)$

$[-\frac{5}{6}, \frac{7}{6}]$

$(-\infty, -\frac{5}{6}] \cup [\frac{7}{6}, +\infty)$

Solution

Intervals

Solve:

$|1-6x|+4 \le 10$

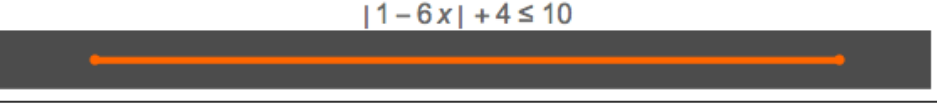
$|1-6x| \le 6$

$-6 \le 1-6x \le 6$

$-6-(1) \le -6x \le 6-(1)$

$-7 \le -6x \le 5$

Divide each side by -6 and flip the inequalities



$-\frac{5}{6} \le x \le \frac{7}{6}$