8. Solve the inequalities $|10-7x|+4 \le 8$
express your solution sets using interval notation.

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

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

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

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

Solution

Intervals

Solve:

$|10-7x|+4 \le 8$

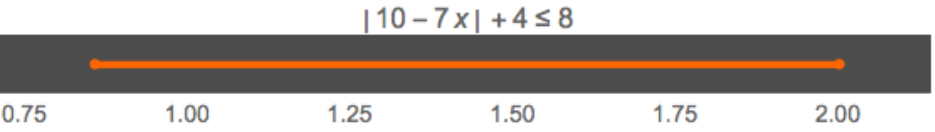
$|10-7x| \le 4$

$-4 \leqslant 10-7x \leqslant 4$

$-4-(10) \leqslant -7x \leqslant 4-(10)$

$-14 \leqslant -7x \leqslant -6$

Divide each side by -7 and flip the inequalities



$\frac{6}{7} \le x \le 2$