

4. Solve the inequality $-1 < 6x - 8 < 1$

express your solution sets using interval notation.

$$\left[\frac{7}{6}, \frac{3}{2}\right]$$

$$\left(-\infty, \frac{7}{6}\right) \cup \left(\frac{3}{2}, +\infty\right)$$

$$\left(\frac{7}{6}, \frac{3}{2}\right)$$

$$\left(-\infty, \frac{7}{6}\right] \cup \left[\frac{3}{2}, +\infty\right)$$

Solution

Intervals

Solve:

$$|6x - 8| + 4 < 5$$

$$|6x - 8| < 1$$

$$-1 < 6x - 8 < 1$$

$$-1 - (-8) < 6x < 1 - (-8)$$

$$7 < 6x < 9$$

Divide each side by 6

$$|6x - 8| + 4 < 5$$

$$\frac{7}{6} < x < \frac{3}{2}$$