

$$\begin{cases} \frac{(-X^2 + 2X + 8)(2X^2 - X + 1 + X + 1)(2X^2 - X + 1 - X - 1)}{(X + 5 - 2X^2 + X - 1)(X + 5 + 2X^2 - X + 1)} < 0 \\ X \geq -9 \end{cases}$$

$$\begin{cases} \frac{(-X^2 + 2 + 2X + 8)(2X^2 + 2)(2X^2 - 2X)}{(-2X^2 + 2X + 4)(2X^2 + 6)} < 0 \\ X \geq -9 \end{cases}$$

1) $-X^2 + 2X + 8 = 0$
 $X^2 - 2X - 8 = 0$

$$\begin{cases} X = 4 \\ X = -2 \end{cases}$$

2) $2X^2 + 2 > 0$
 При $X \in \mathbb{R}$
 Заменяем (1)

3) $2X^2 + 6 > 0$
 При $X \in \mathbb{R}$

Заменяем (1)

4) $X^2 - X - 2 = 0$

$$\begin{cases} X = 2 \\ X = -1 \end{cases}$$

