

15 Решите неравенство: $(3x + 7) \cdot \log_{2x+5}(x^2 + 4x + 5) \leq 0$

$G \cdot H \leq 0$

$\log_a(b) \leq h$

$$(3x+7) \cdot \log_{(2x+5)}(x^2+4x+5) \leq 0$$

$$\{\log_{(2x+5)}(x^2+4x+5) \leq 0$$

$$\{x \geq -7/3$$

$$\{\log_{(2x+5)}(x^2+4x+5) \geq 0$$

$$\{x \leq -7/3$$

$G \geq 0$

$a > 1$

$H \leq 0$

\leq

$$\{x^2+4x+5 \leq 1$$

$$\{-2 \geq x \geq -7/3$$

$$\{x^2+4x+5 \geq 1$$

$$\{x \leq -7/3$$

$$\{2x+5 > 1 \quad x > -2 \quad \text{нет реш}$$

или

$0 < a < 1$

\geq

$G \leq 0$

$H \geq 0$

$$\{x^2+4x+5 \leq 0$$

$$\{-2 \geq x \geq -7/3$$

$$\{x^2+4x+5 \leq 1$$

$$\{x \leq -7/3$$

$$\{0 < 2x+5 < 1$$

$$\{x = -2$$

$$\{-2 \geq x \geq -7/3$$

$$x = -2$$

$$\{x^2+4x+5 \leq 1$$

$$\{-5/2 \leq x \leq -2$$

Ответ: -2

$$1 = 2x + 5$$

$$x = -4/2$$

$$x = -2$$

$$\{x = -2$$

$$\{-5/2 \leq x \leq -2 \quad x = -2$$

$$0 = 2x + 5$$

$$x = -5/2$$