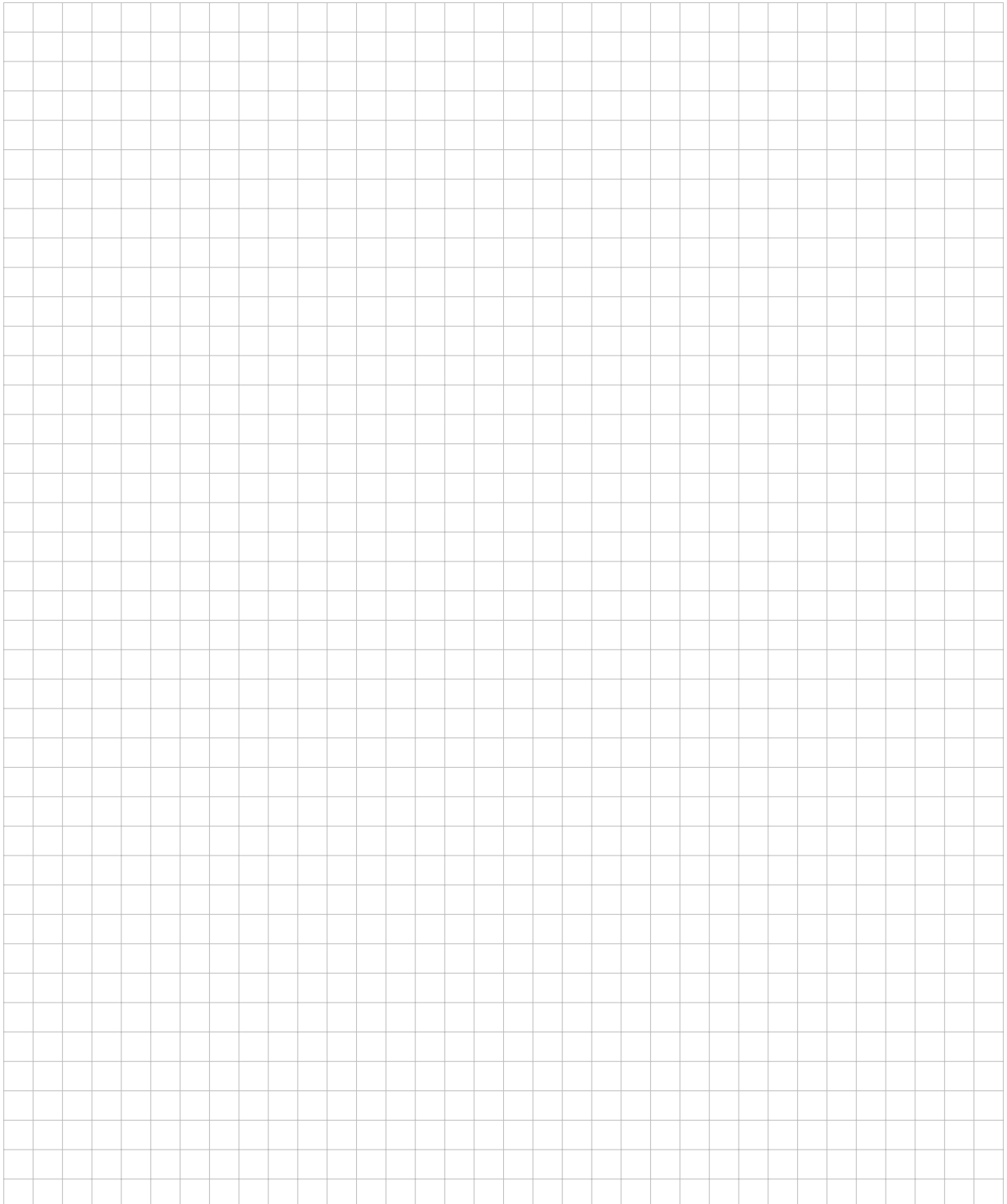


Задачи к вебинару 12.11.2025

Задание 1

Решите неравенство:

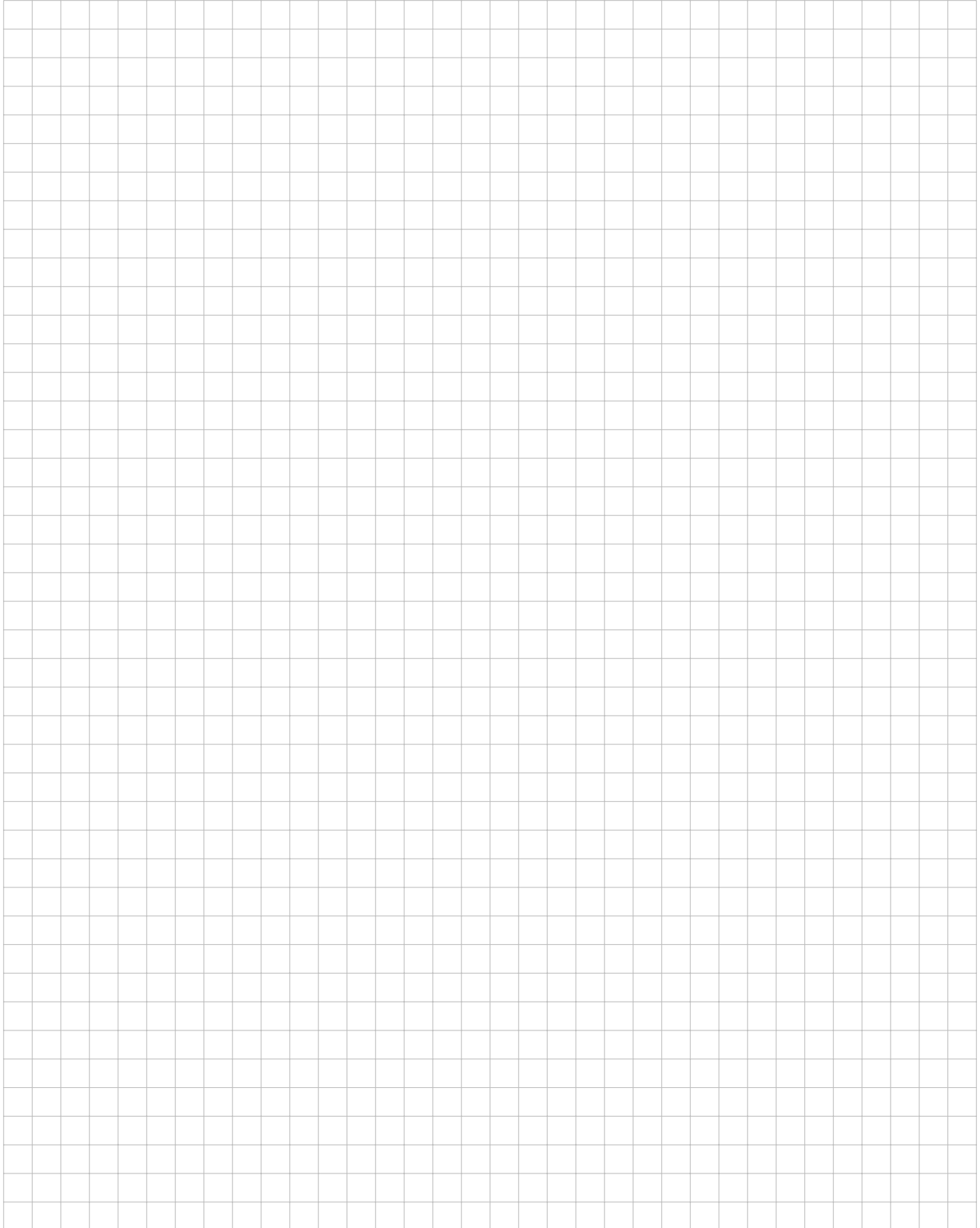
$$(8 - x)(x + 4) \log_{0,3}(x - 1) \geq 0.$$



Задание 2

Решите неравенство:

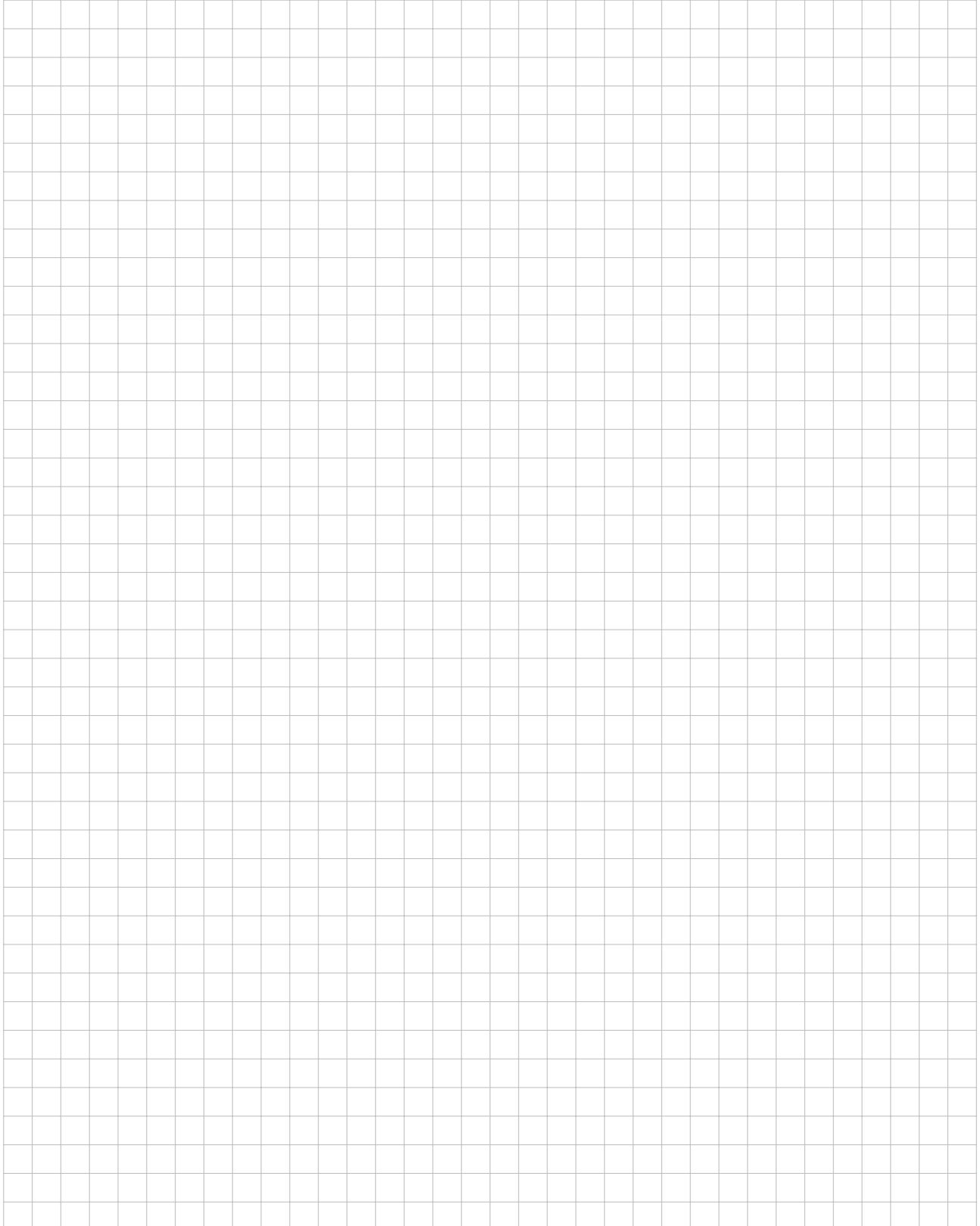
$$\frac{2x^2 - 5x + 2}{\log_{11}(x + 2)} \leq 0.$$



Задание 3

Решите неравенство:

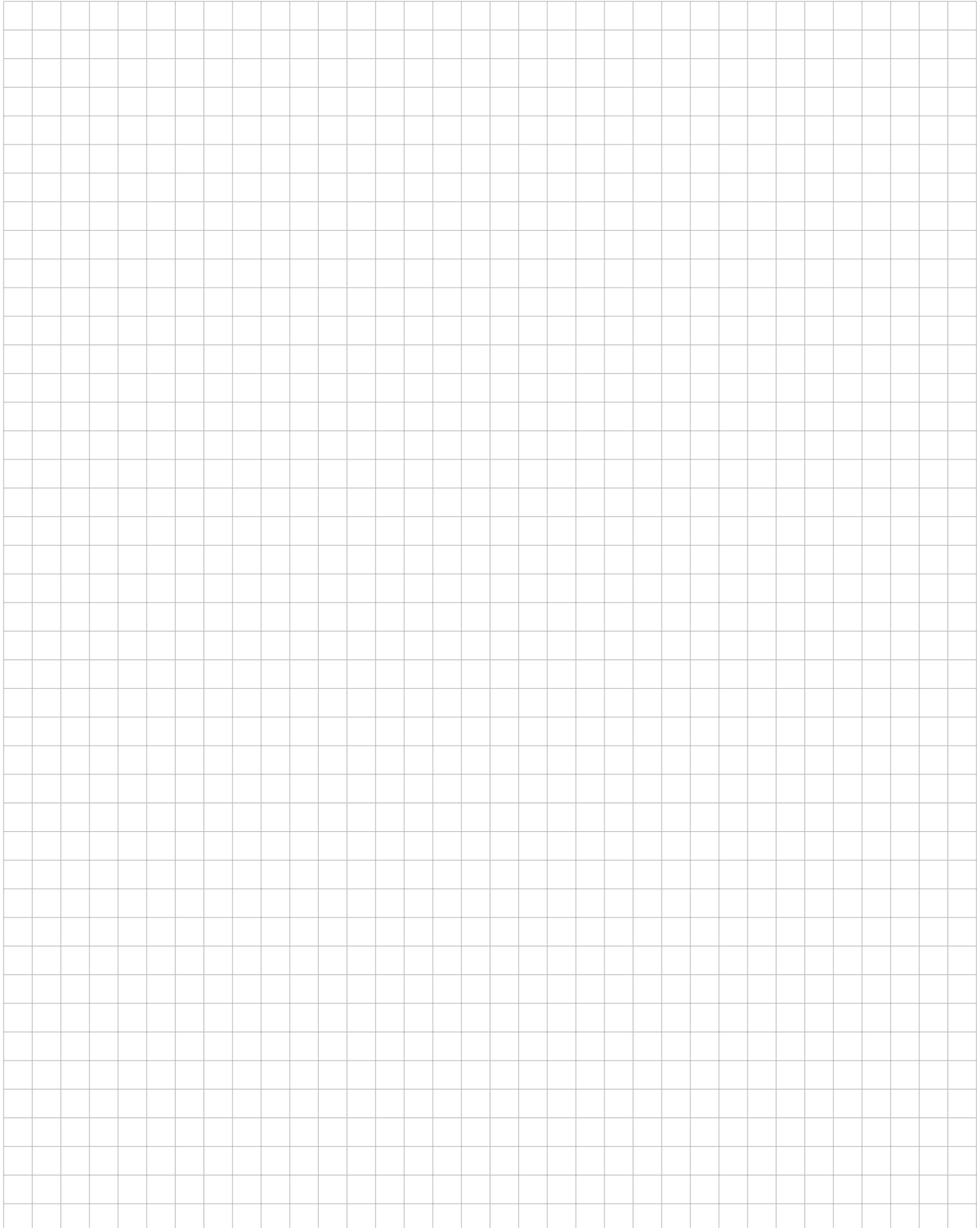
$$\frac{\log_3(8x^2 - 11x + 4)}{\log_3 x} < 2.$$



Задание 4

Решите неравенство:

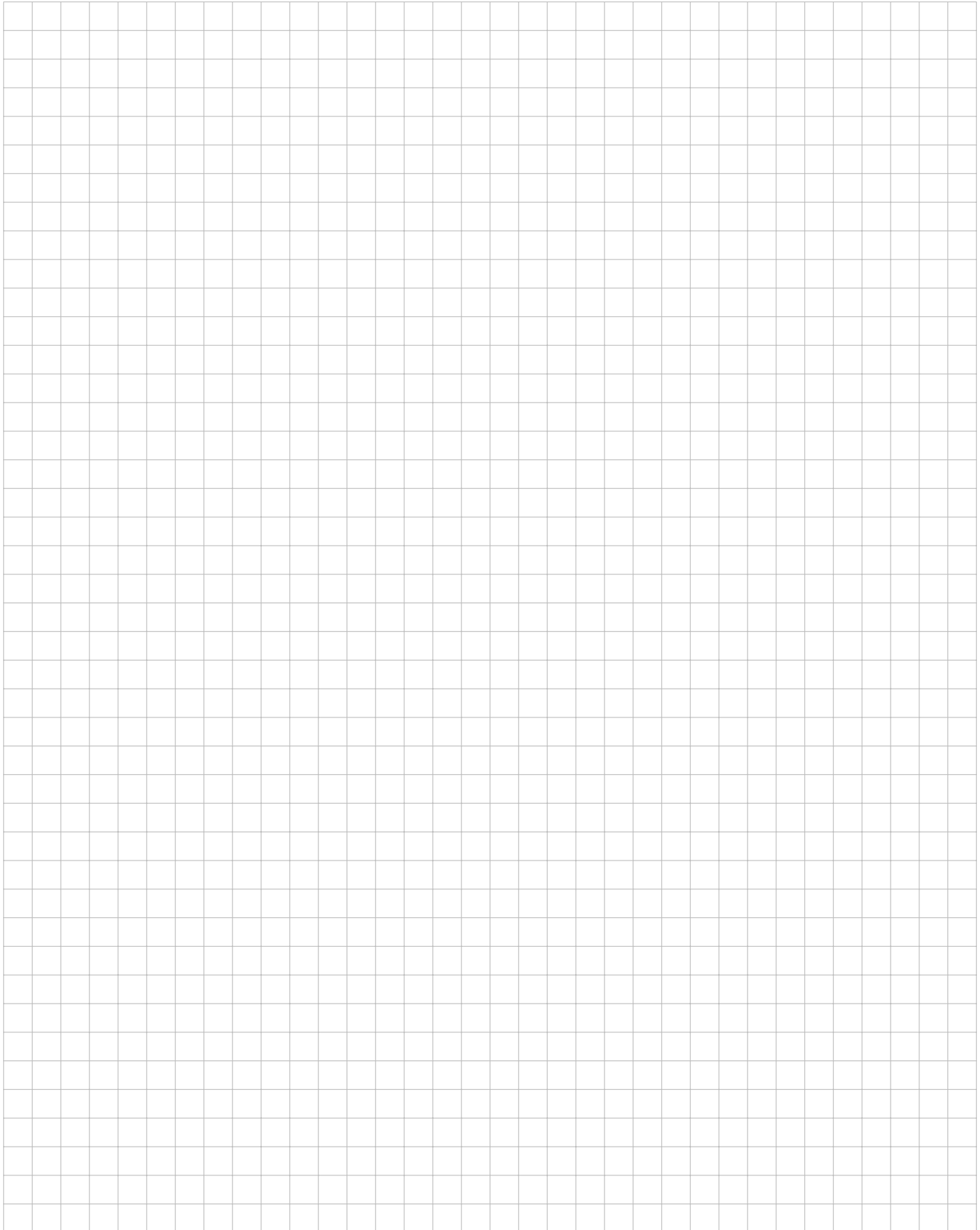
$$\frac{\log_4 x^2 + \log_{0,25} (6x - 9)}{x - 8} \geq 0.$$

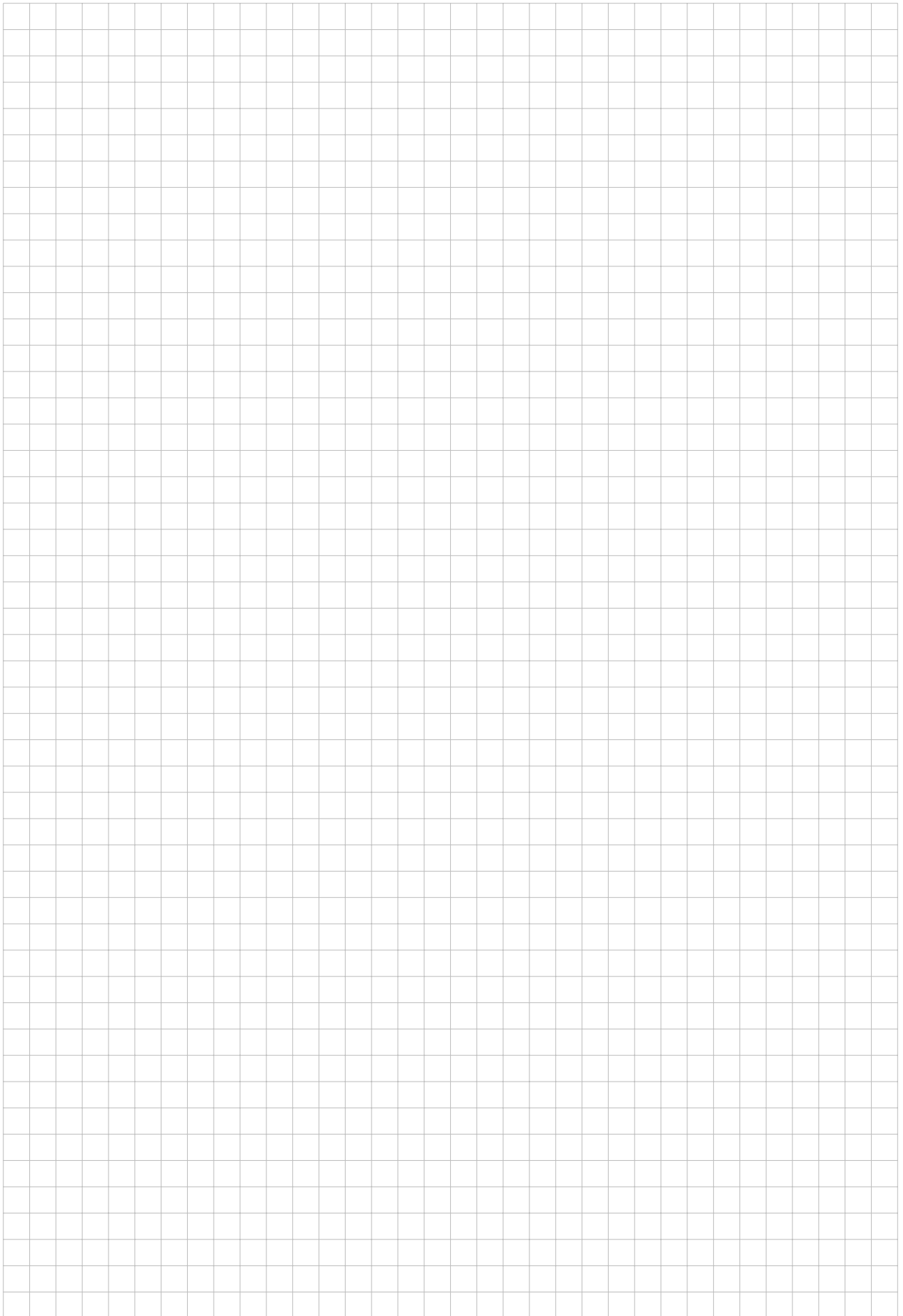


Задание 5

Решите неравенство:

$$\log_{2-x}(x+2) \cdot \log_{x+3}(3-x) \leq 0.$$

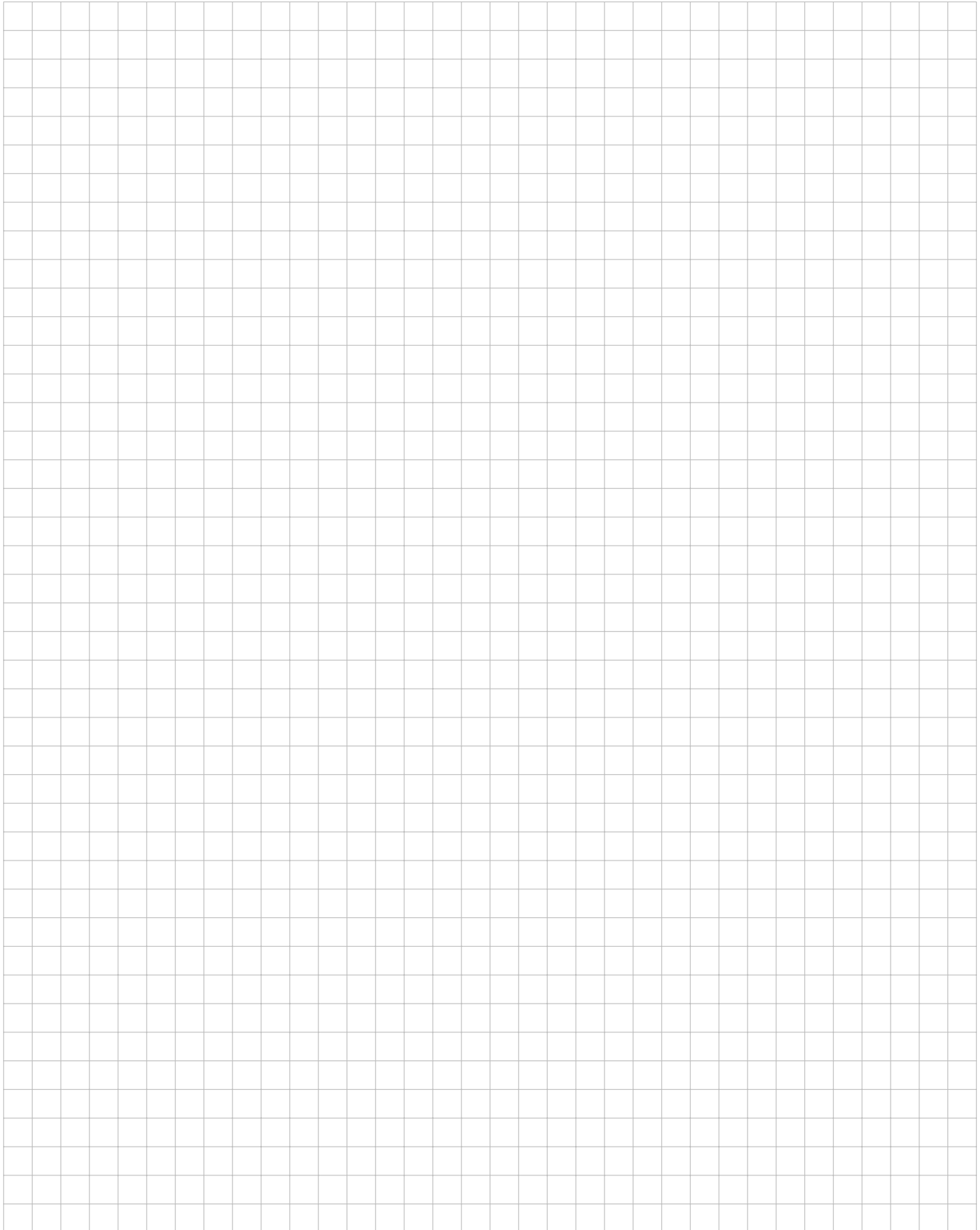


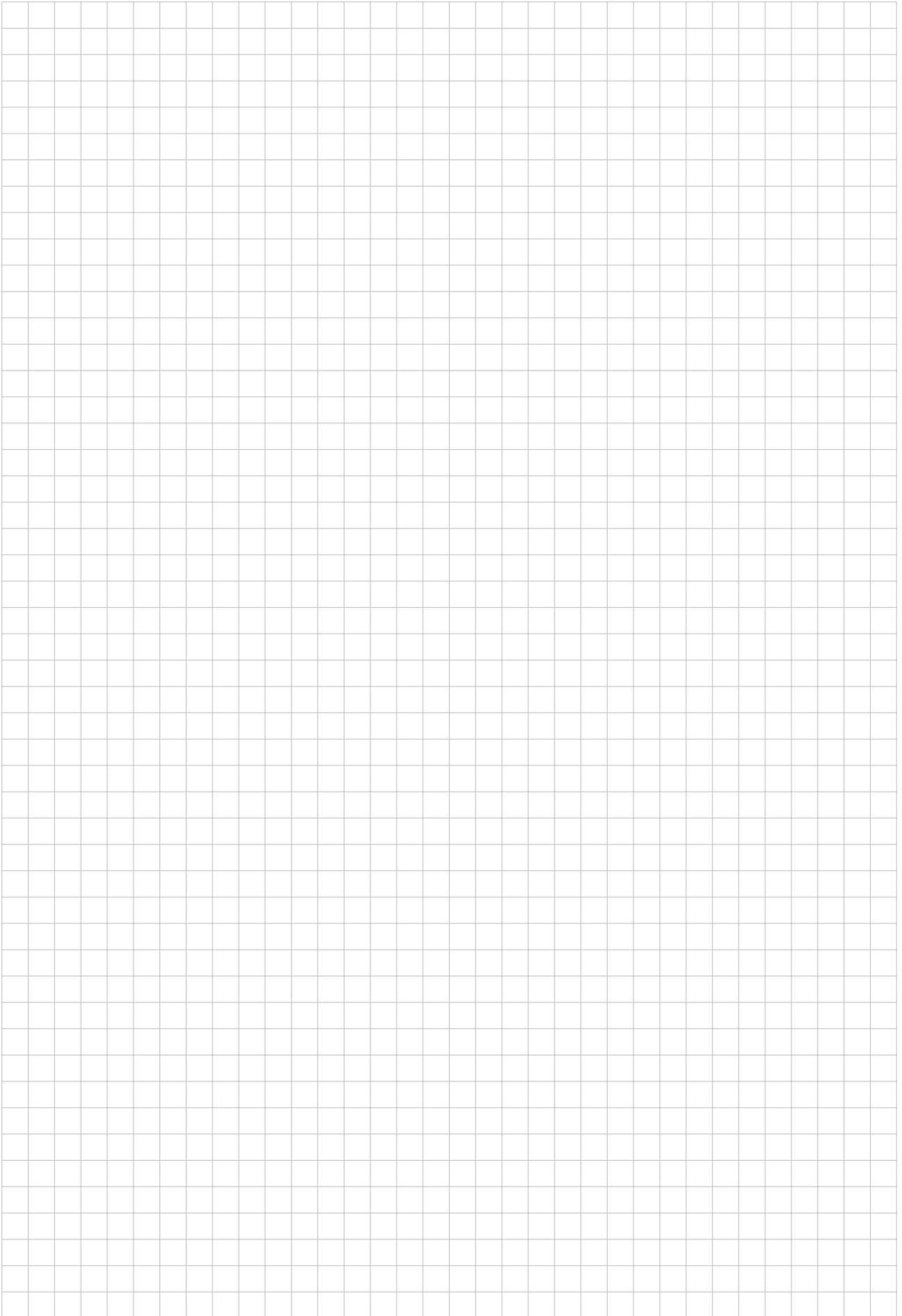


Задание 6

Решите неравенство:

$$(5x - 13) \cdot \log_{2x-5}(x^2 - 6x + 10) \geq 0.$$

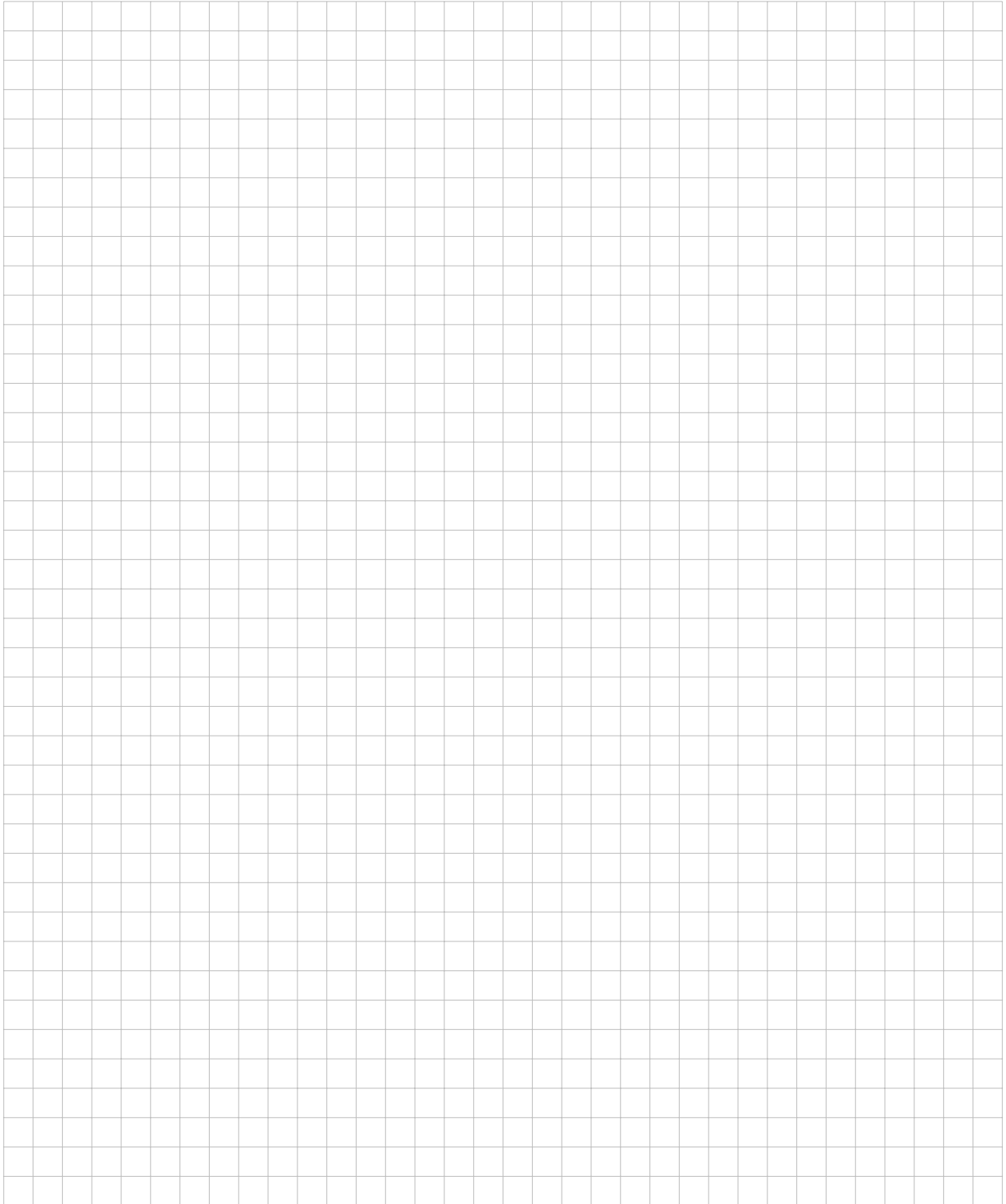


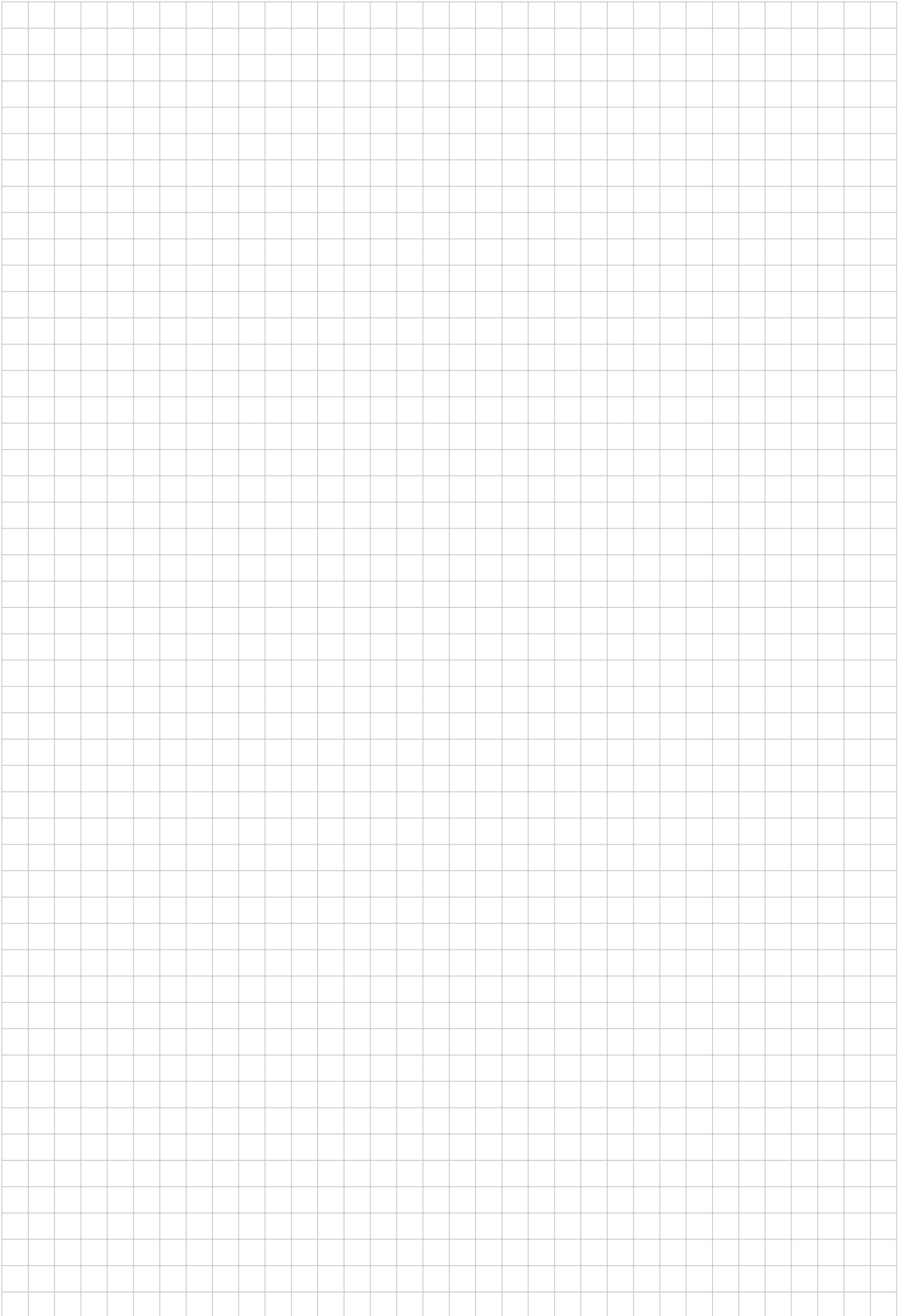


Задание 7

Решите неравенство:

$$\frac{(\log_2(x-1) + \log_2(2x-1))(|x| - |x-2|)}{\sqrt{3x-2} - \sqrt{2x-1}} \leq 0.$$





ОТВЕТЫ

1. $x \in (1; 2] \cup [8; +\infty)$;
2. $x \in (-2; -1) \cup \left[\frac{1}{2}; 2\right]$;
3. $x \in \left(0; \frac{4}{7}\right)$;
4. $x \in \{3\} \cup (8; +\infty)$;
5. $x \in (-2; -1] \cup (1; 2)$;
6. $x \in \left(\frac{5}{2}; \frac{13}{5}\right] \cup (3; +\infty)$;
7. $x \in \left(1; \frac{3}{2}\right]$.