My Problem

consider a vector of n components:

$$V = (X_1, X_2, ..., X_h, ..., X_k, ...X_n)$$

such that $X_1 \leq X_2 \leq ... \leq X_h \leq ... \leq X_k \leq ... \leq X_n$ and $X_1 \geq 0$

Query: I want an algorithm that allows to find "h" and "k" such that

$$\frac{a \times n \times \sum_{i=1}^{n} X_i}{(n+1-k)(n+k-2h)} \leq \min\left\{X_k - X_{k-1}, \frac{X_{h+1} - X_h}{n+1-k}\right\}$$

with

$$0 < a < 1$$
$$n \geq 2$$
$$k \leq n$$
$$1 \leq h < k$$

Notice that if $\min\left\{X_k - X_{k-1}, \frac{X_{h+1}-X_h}{n+1-k}\right\} = 0$ there is no solution.