```
\left(\begin{array}{cccc} \lfloor a_{1j_1} & & & & \\ & \frac{\int_1^2 f(x) \mathrm{d}x}{a_{2j_2}} & & & \\ & & \ddots & & \\ & & & \lfloor agggggggggr_{j_r} \cdots \end{pmatrix}\right)
```