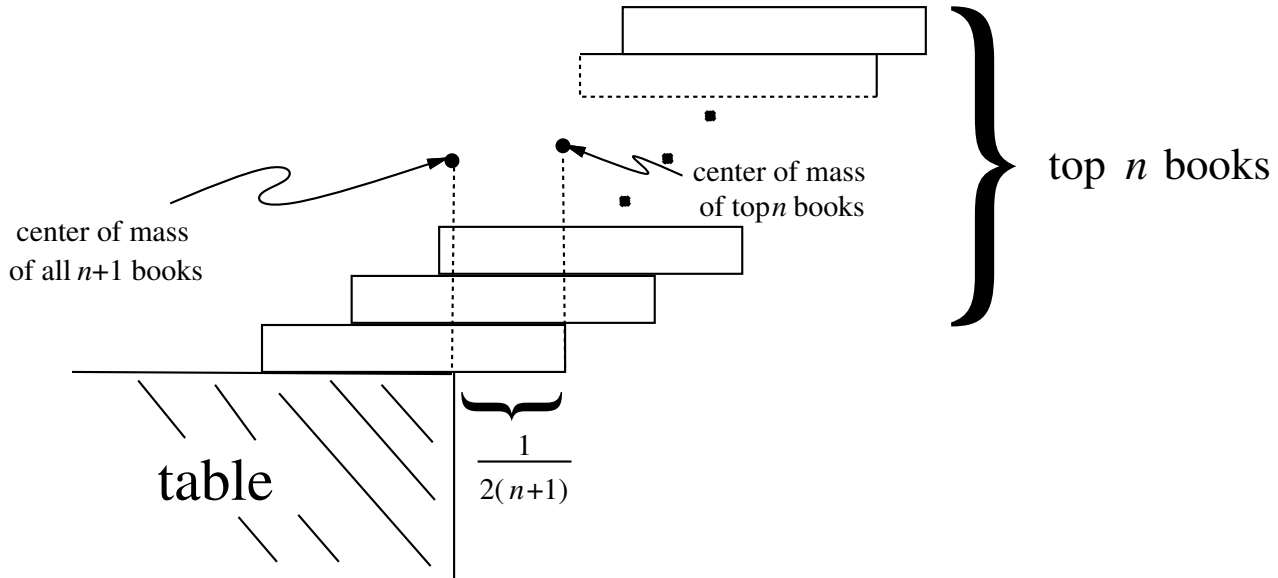
center of mass
of all n+1 books
center of mass
of top$n$ books
top n books
table
$\frac{1}{2(n+1)}$