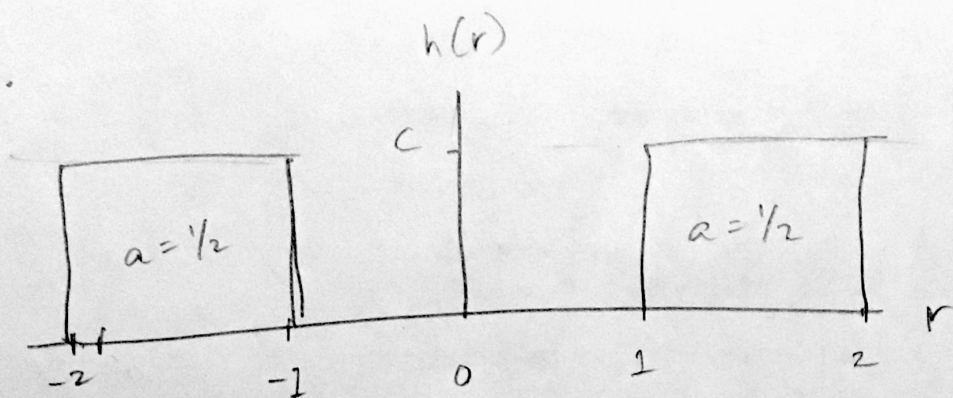


3.



c must equal $1/2$ in order for the PDF to integrate to 1.

b) 0^{th} moment \rightarrow mean $\rightarrow 0$ (equally distributed about 0)

1^{st} moment \rightarrow variance \rightarrow stdev = 1.5 \rightarrow variance = $(1.5)^2$
 $\quad \quad \quad = \text{stdev}^2$