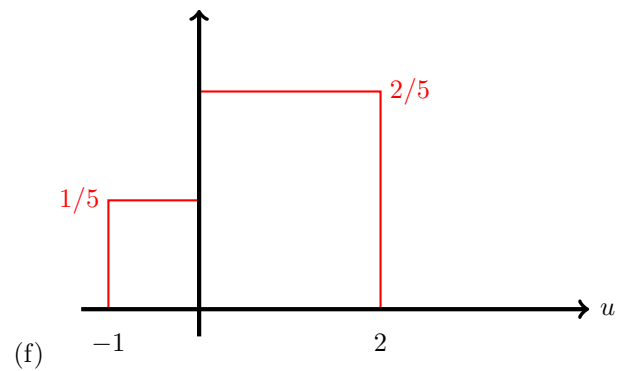
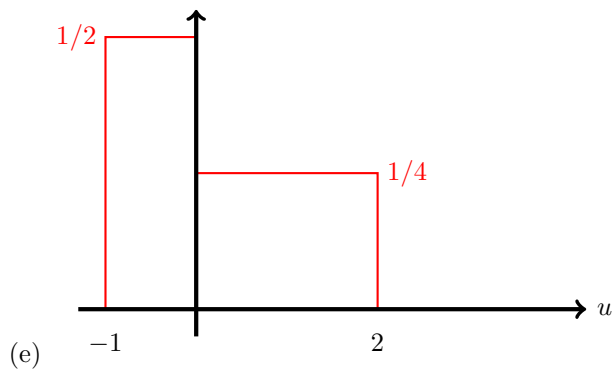
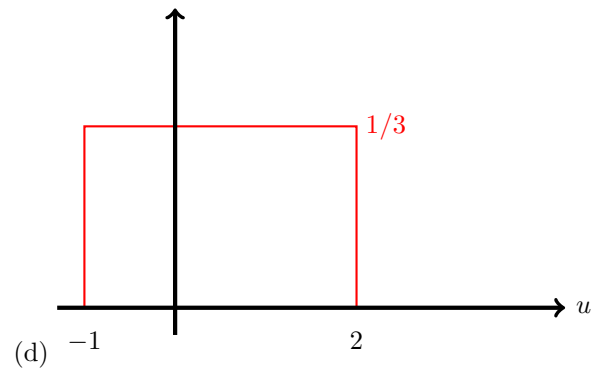
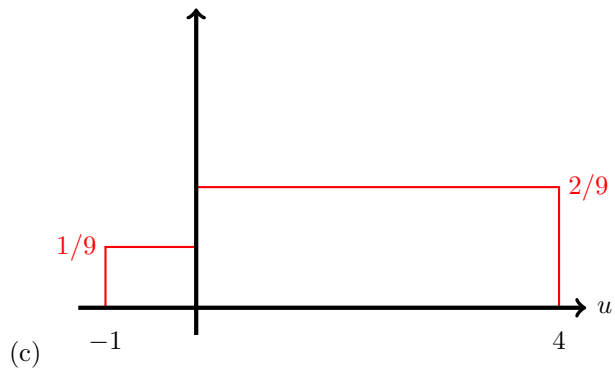
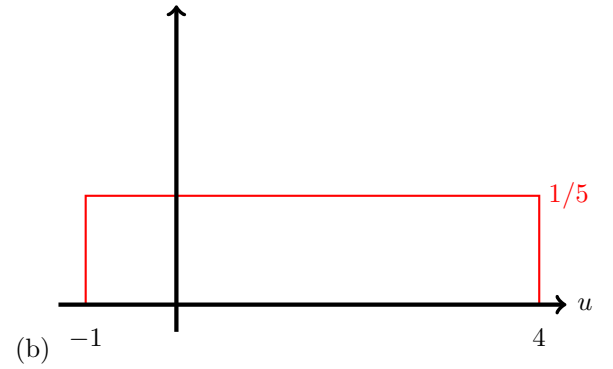
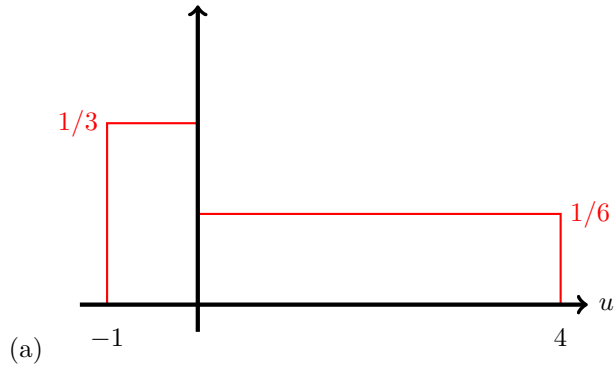
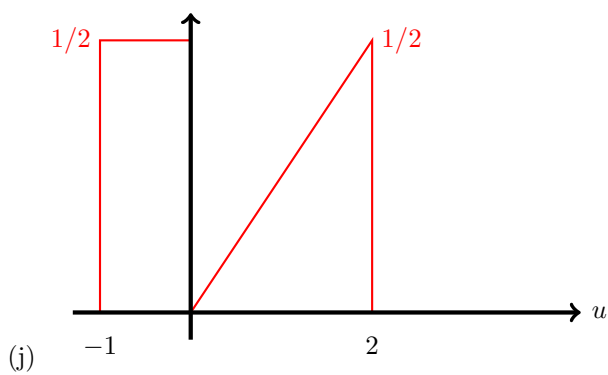
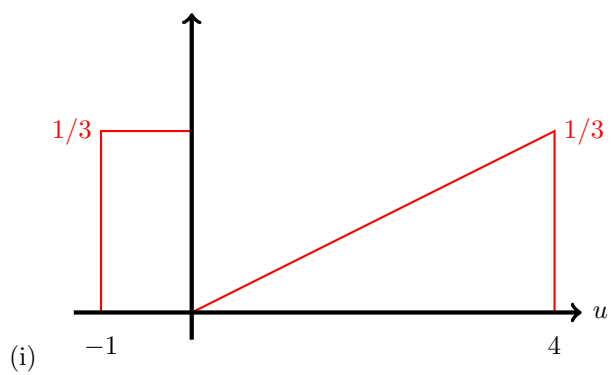
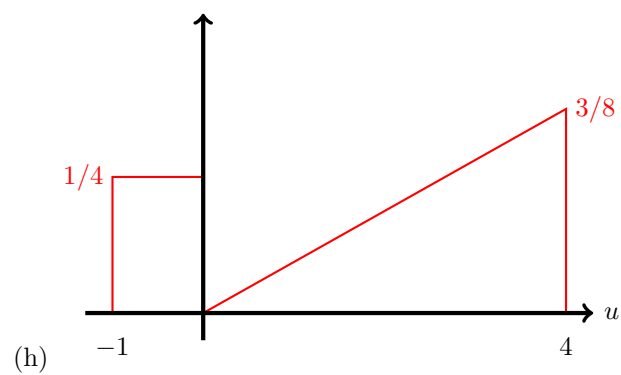
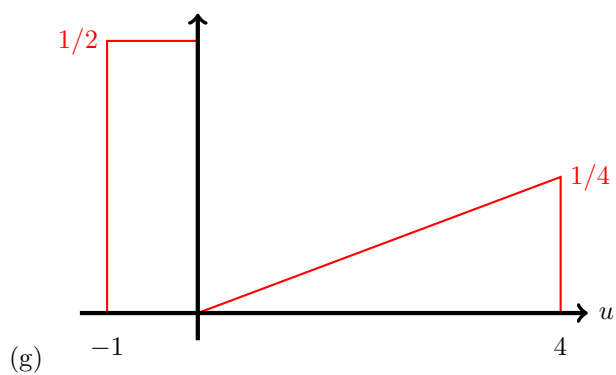


Let X be a continuous random variable which is uniform on $[-1, 2]$ and let $Y = g(X)$, where

$$g(u) = \begin{cases} u & \text{if } u \leq 0 \\ 2u & \text{if } u > 0. \end{cases}$$

Which of the following is the probability density function $f_Y(u)$?
(Note: the red numbers represent heights)





- (a) (a)
- (b) (b)
- (c) (c)
- (d) (d)
- (e) (e)
- (f) (f)
- (g) (g)
- (h) (h)
- (i) (i)
- (j) (j)
- (k) None of these