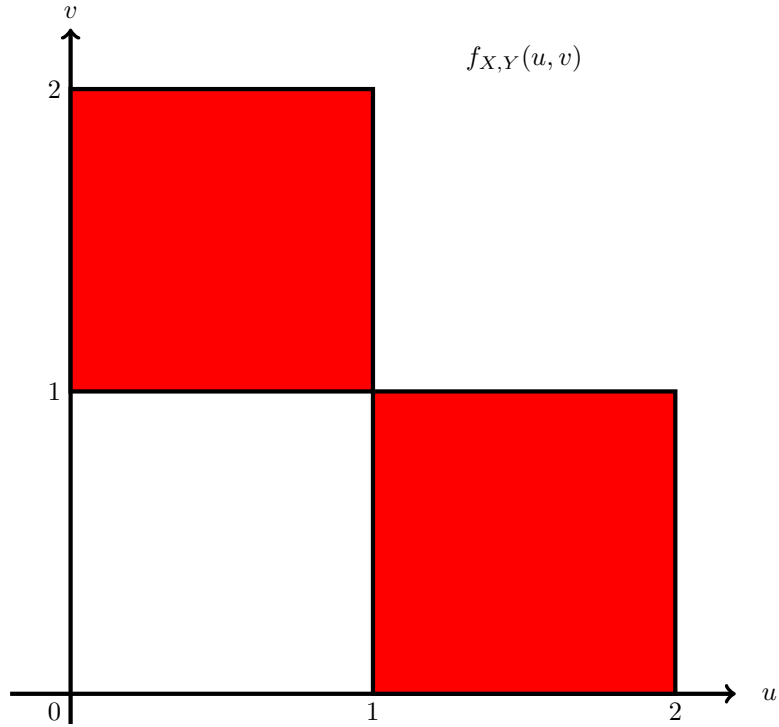


Suppose random variables X and Y have a joint probability density function $f_{X,Y}(u,v)$ which is constant in the red region shown below, and zero elsewhere. What is the joint cumulative distribution function value $F_{X,Y}(\sqrt{2}, \sqrt{2})$?



- (a) $\sqrt{2} - 1$
- (b) $2\sqrt{2} - 2$
- (c) $1/4$
- (d) $3 - 2\sqrt{2}$
- (e) $1.5 - \sqrt{2}$
- (f) $2\sqrt{2}$
- (g) $\sqrt{2}/2$
- (h) $\sqrt{2}/4$
- (i) $\sqrt{2}/8$
- (j) $\sqrt{2} - 1$
- (k) $2 - \sqrt{2}$
- (l) $1/2$
- (m) None of these