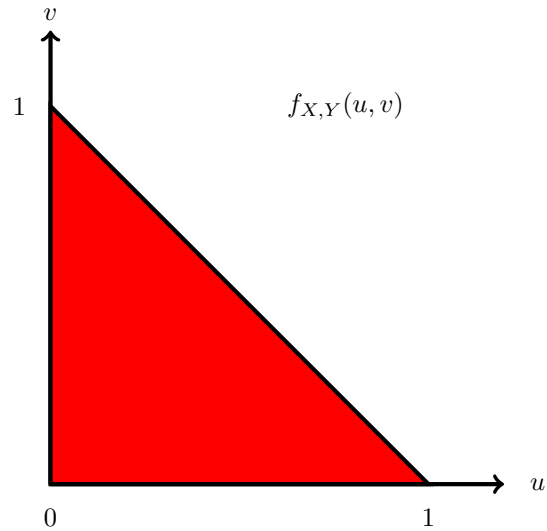


Random variables X and Y have joint probability density function $f_{X,Y}(u,v)$ which is uniform on the red area in the figure below. What is the expected value of their product?



- (a) $1/12$
- (b) $1/48$
- (c) $1/24$
- (d) $1/4$
- (e) $1/96$
- (f) $1/6$
- (g) $1/3$
- (h) $2/3$
- (i) $1/2$
- (j) $3/4$
- (k) $1/8$
- (l) None of these