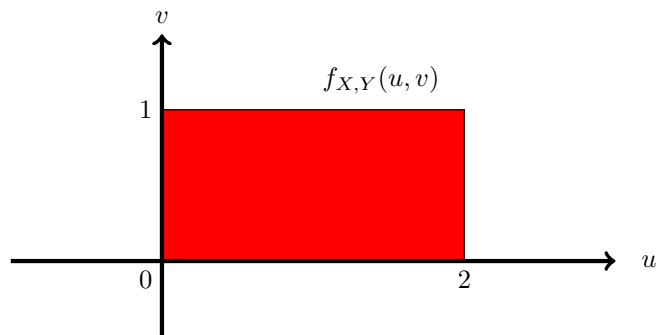


If random variables X and Y have a joint pdf equal to $f_{X,Y}(u,v) = uv$ in the red rectangle in the figure below and which is zero elsewhere, then what is the probability that X is less than one?



- (a) $1/4$
- (b) $1/2$
- (c) $1/8$
- (d) $1/16$
- (e) $1/3$
- (f) $2/3$
- (g) $3/4$
- (h) $3/8$
- (i) $3/16$
- (j) $5/16$
- (k) $5/8$
- (l) None of these