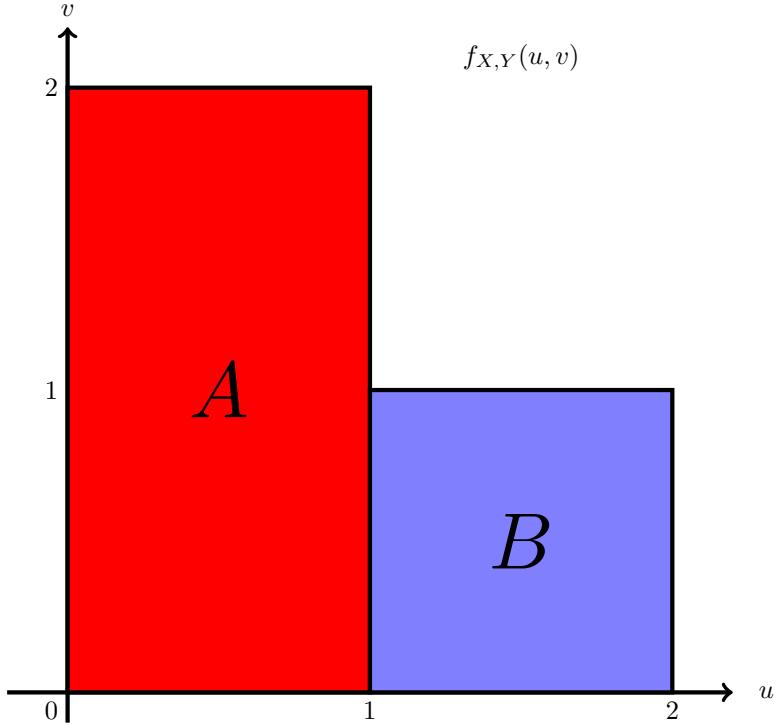


Suppose random variables X and Y have a joint probability density function $f_{X,Y}(u, v)$ which equals A in the red region, B in the blue region, and 0 elsewhere, as shown in the figure. Suppose the joint cumulative distribution function is $F_{X,Y}(u, v)$. If $F_{X,Y}(1, 3) = 1/2$, then what is $F_{X,Y}(3/2, 3/2) - F_{X,Y}(1, 1)$?



- (a) $3/8$
- (b) $3/4$
- (c) $3/16$
- (d) $1/8$
- (e) $1/4$
- (f) $1/2$
- (g) $5/16$
- (h) $7/16$
- (i) $1/32$
- (j) $3/32$
- (k) $5/32$
- (l) None of these.