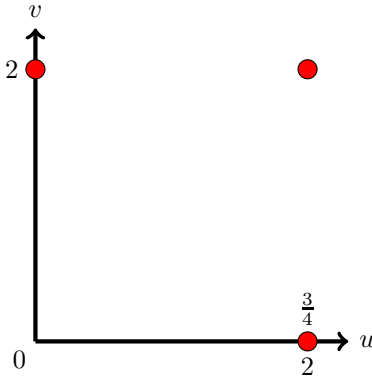


Suppose random variables X and Y have the joint probability mass function $p_{X,Y}(u,v)$ shown below (only one of its three nonzero probabilities is shown) and their covariance is $-1/4$. What is the probability that X is less than $2/3$?



- (a) $1/12$
- (b) $5/12$
- (c) $5/6$
- (d) $2/3$
- (e) $1/3$
- (f) $1/6$
- (g) $3/5$
- (h) $1/5$
- (i) $1/2$
- (j) 0
- (k) $7/12$
- (l) $5/24$
- (m) None of these