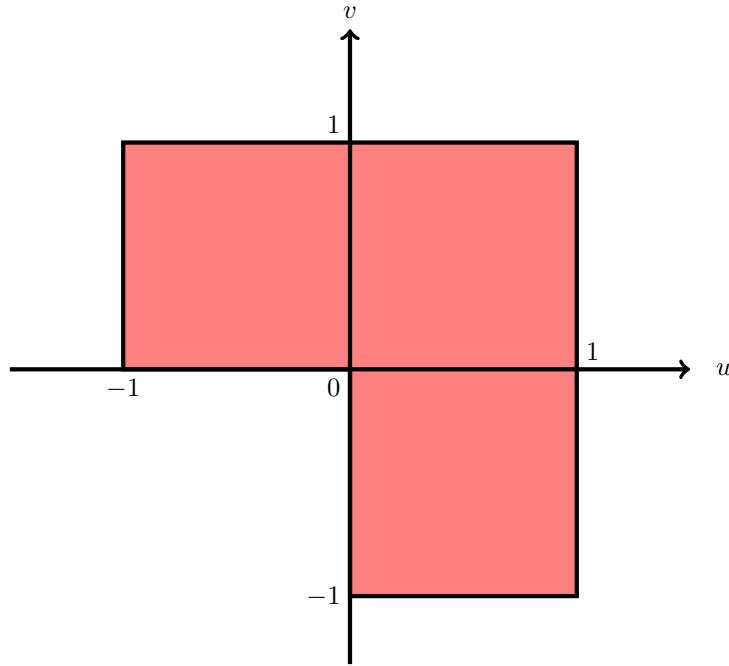


Suppose X and Y are random variables whose joint probability density function is uniform in the red region shown below, and zero elsewhere. What is the expected value of XY ?



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