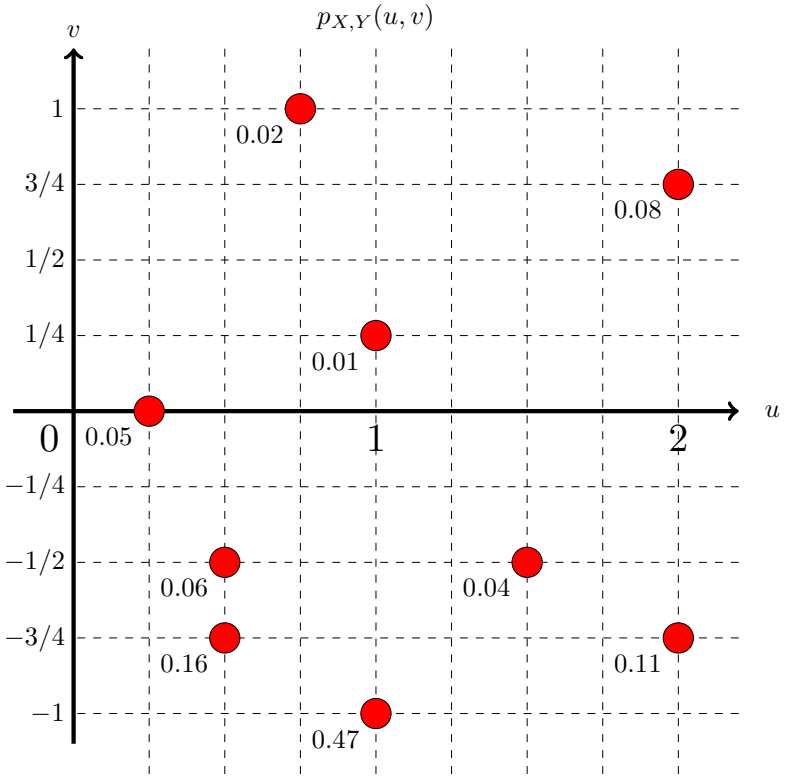
Random variables X and Y have the joint probability mass function $p_{X,Y}(u,v)$ shown below, joint cummulative distribution function $F_{X,Y}(u,v)$, and marginal probability mass functions $p_X(u)$ and $p_Y(v)$. What is the value of $p_Y(-2^{-1}) + F_{X,Y}(2^{100}, 2^{-100})$?



(a) 0.99

(b) 0.90

(c) 0.89

(d) 0.94

(e) 1.11

(f) 0.98

(g) 0.1

(h) 1.08

(i) 0.12

(j) 1.37

(k) 0.06

(l) None of these