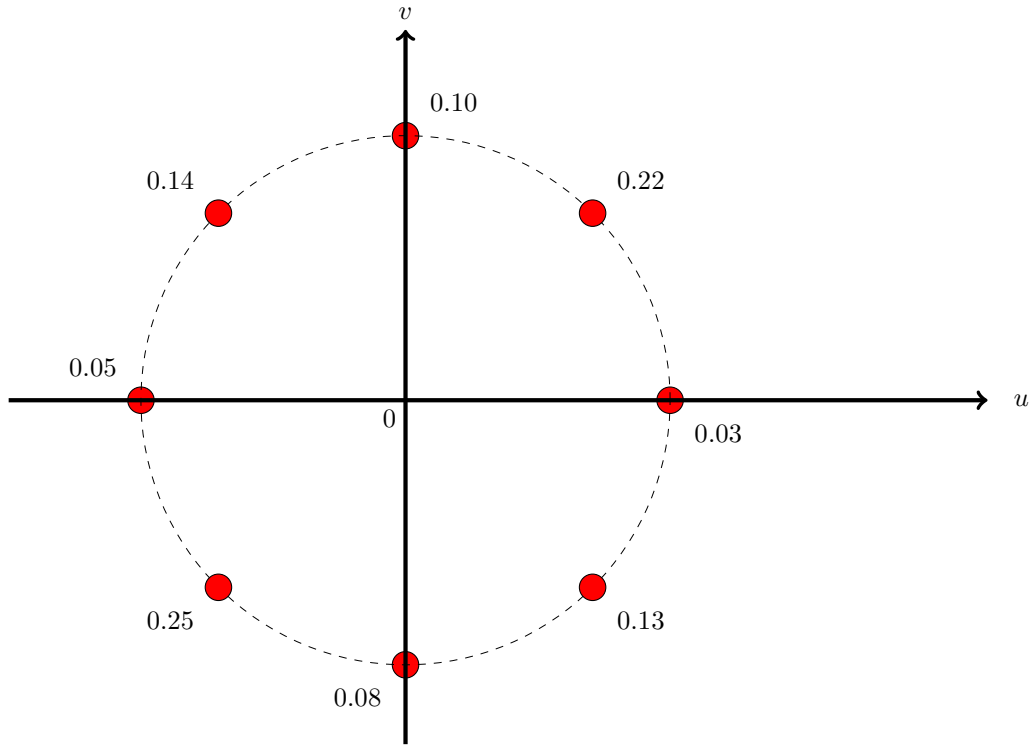


Suppose  $X$  and  $Y$  are random variables whose joint probability mass function consists of the 8 red points on the unit circle shown below. What is the probability that  $(X - 1)^2 + (Y + 1)^2$  is less than or equal to one?



- (a) 0.24
- (b) 0.13
- (c) 0.16
- (d) 0.21
- (e) 0.35
- (f) 0.22
- (g) 0.25
- (h) 0.38
- (i) 0.29
- (j) 0.14
- (k) 0.46
- (l) 0.71
- (m) None of these