Suppose X and Y are i.i.d. random variables, each with probability density function uniform on the interval $[-1, 2]$. What is the probability that X^2 is greater than $2Y$?

(a) None of these

(b) 1/6

(c) 1/3

(d) 5/12

(e) 2/3

(f) 5/6

(g) 1/12

(h) 1/4

(i) 3/4

(j) 1/9

(k) 2/9

(l) 4/9