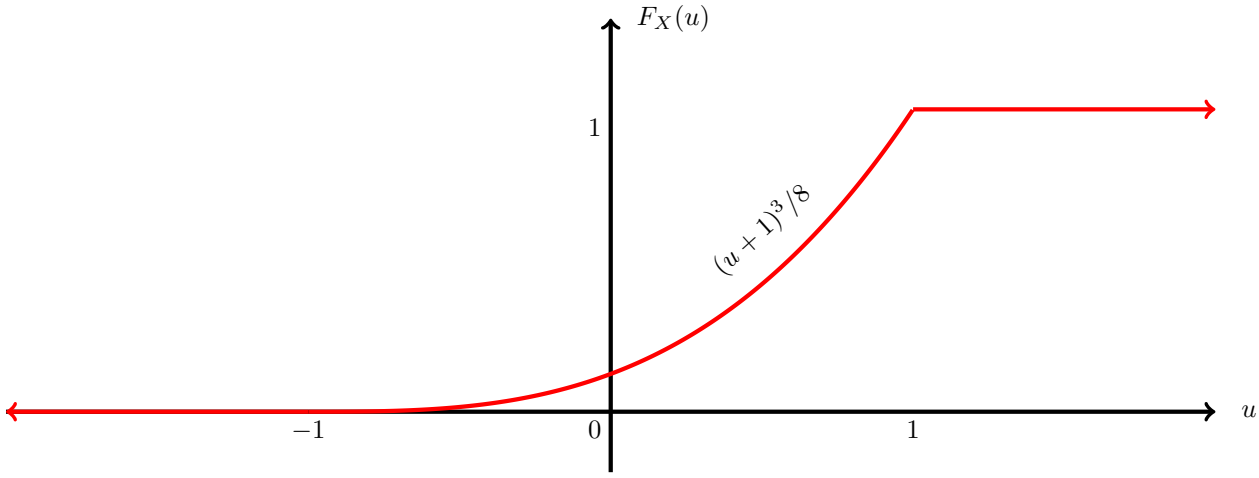
Let X be a random variable whose cummulative distribution function is $(u+1)^3/8$ on $[-1,1]$, as shown below. What is the probability that $0 < X < 3$, given that $-2 < X < 1/2$?



(a) 19/27

(b) 8/27

(c) 1/8

(d) 4/9

(e) 5/9

(f) 1/4

(g) 3/4

(h) 1

(i) 1/9

(j) 1/3

(k) 1/2

(l) None of these