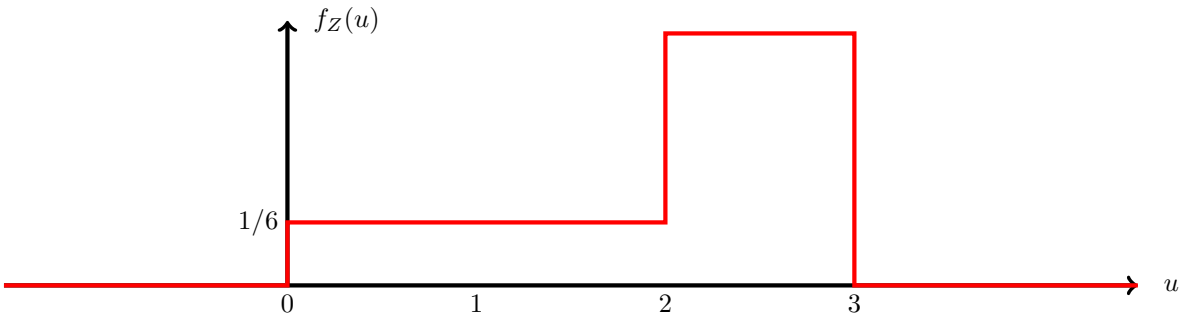
If random variable Z has probability density function shown below, then what is its expected value?



(a) 2

(b) 1

(c) 3

(d) 0

(e) 1/2

(f) 5/2

(g) 3/2

(h) 3/4

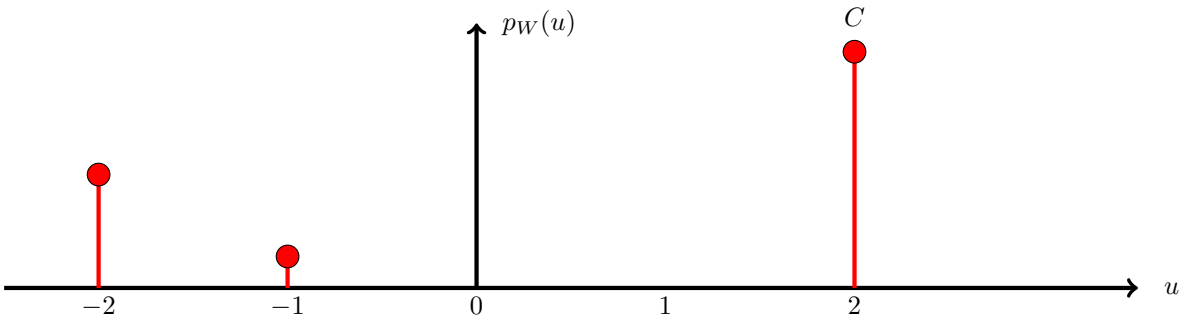
(i) 1/3

(j) 6/5

(k) 2/3

(l) None of these

The random variable W has probability mass function shown below. Its expected value is 1/4 and the probability that W^2 is larger than two is 11/12. What is C?



(a) 13/24

(b) 1/8

(c) 3/8

(d) 5/8

(e) 1/24

(f) 11/24

(g) 5/12

(h) 7/12

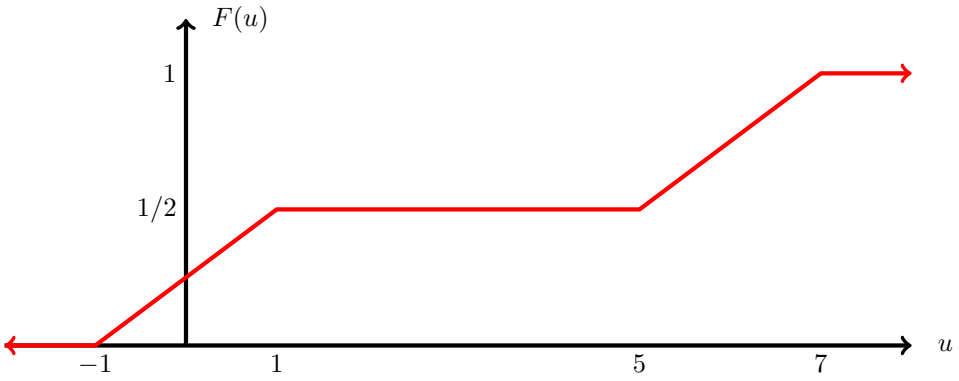
(i) 1/6

(j) 5/6

(k) 3/8

(l) None of these

What is the variance of a random variable whose cummulative distribution function is shown below?



(a) 28/3

(b) 14/3

(c) 56/3

(d) 112/3

(e) 6

(f) 3

(g) 1/3

(h) 2/3

(i) 16

(j) 8

(k) 9

(l) None of these