

221. You are given:

(i) The sample:

1 2 3 3 3 3 3 3 3 3

(ii) $\hat{F}_1(x)$ is the kernel density estimator of the distribution function using a uniform kernel with bandwidth 1.

(iii) $\hat{F}_2(x)$ is the kernel density estimator of the distribution function using a triangular kernel with bandwidth 1.

Determine which of the following intervals has $\hat{F}_1(x) = \hat{F}_2(x)$ for all x in the interval.

(A) $0 < x < 1$

(B) $1 < x < 2$

(C) $2 < x < 3$

(D) $3 < x < 4$

(E) None of (A), (B), (C) or (D)