

**201.** You test the hypothesis that a given set of data comes from a known distribution with distribution function  $F(x)$ . The following data were collected:

Interval	$F(x_i)$	Number of Observations
$x < 2$	0.035	5
$2 \leq x < 5$	0.130	42
$5 \leq x < 7$	0.630	137
$7 \leq x < 8$	0.830	66
$8 \leq x$	1.000	50
Total		300

where  $x_i$  is the upper endpoint of each interval.

You test the hypothesis using the chi-square goodness-of-fit test.

Determine the result of the test.

- (A) The hypothesis is not rejected at the 0.10 significance level.
- (B) The hypothesis is rejected at the 0.10 significance level, but is not rejected at the 0.05 significance level.
- (C) The hypothesis is rejected at the 0.05 significance level, but is not rejected at the 0.025 significance level.
- (D) The hypothesis is rejected at the 0.025 significance level, but is not rejected at the 0.01 significance level.
- (E) The hypothesis is rejected at the 0.01 significance level.