

**140.** You are given the following random sample of 30 auto claims:

54      140      230      560      600      1,100      1,500      1,800      1,920      2,000  
2,450    2,500    2,580    2,910    3,800    3,800    3,810    3,870    4,000    4,800  
7,200    7,390    11,750    12,000    15,000    25,000    30,000    32,300    35,000    55,000

You test the hypothesis that auto claims follow a continuous distribution  $F(x)$  with the following percentiles:

$x$	310	500	2,498	4,876	7,498	12,930
$F(x)$	0.16	0.27	0.55	0.81	0.90	0.95

You group the data using the largest number of groups such that the expected number of claims in each group is at least 5.

Calculate the chi-square goodness-of-fit statistic.

- (A) Less than 7
- (B) At least 7, but less than 10
- (C) At least 10, but less than 13
- (D) At least 13, but less than 16
- (E) At least 16