

262. You are given:

- (i) At time 4 hours, there are 5 working light bulbs.
- (ii) The 5 bulbs are observed for p more hours.
- (iii) Three light bulbs burn out at times 5, 9, and 13 hours, while the remaining light bulbs are still working at time $4 + p$ hours.
- (iv) The distribution of failure times is uniform on $(0, \omega)$.
- (v) The maximum likelihood estimate of ω is 29.

Determine p .

- (A) Less than 10
- (B) At least 10, but less than 12
- (C) At least 12, but less than 14
- (D) At least 14, but less than 16
- (E) At least 16