

Full Name: _____

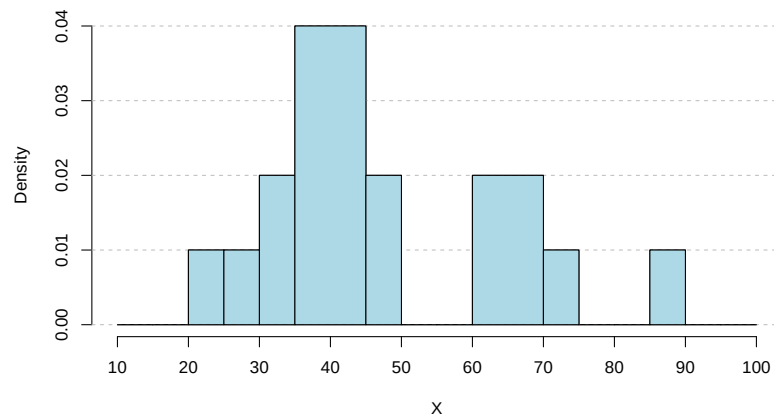
Student No: _____

Grade:

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For each answer, **provide a short argument.**

1. (2 points) The following diagram is the histogram of a numerical variable X from a data set.



- (a) What percentage of the values are between 60 and 80?

Answer:

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- (b) Does 33 lie within the first quartile?

Answer:

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2. (3 points) Two strangers, a carpenter and a plumber, run into each other in the street. Let A denote the event that the two individuals are born on the same day of the year, and let B denote the event that (at least) one of them is born in January. We ignore February 29, and assume that each individual is equally likely to be born on any of the 365 days of the year. January has 31 days.

(a) What is the probability of A ?

Answer:

(b) What is the probability of B ?

Answer:

(c) Which is larger: $\mathbb{P}(A \mid B)$ or $\mathbb{P}(B \mid A)$?

[Hint: It is not necessary to compute the two conditional probabilities.]

Answer:

3. (0 points) On the scale of 0–5, what do you think your grade will be on this quiz?