

Solutions

Authored self-check guidance: accept equivalent correct methods and supported interpretations. The points check reasoning, not an official grade.

2.1 A – Subtract and add three points. B misreads three percentage points as 0.03 points; C uses the margin as an endpoint rather than subtracting it from the estimate.

Correct response linked to the given case.

2.2 A – Assignment addresses competing differences between groups. B has self-selection and no assigned treatment; C supplies association without controlling competing causes.

Correct response linked to the given case.

2.3 $76 - 71 + 5 = 76$.

Correct response linked to the given case.

2.4 False – More observations do not repair a systematically unrepresentative selection.

Correct response linked to the given case.

3.1 Interval is $62\% - 4\% = 58\%$ to $62\% + 4\% = 66\%$, where the subtraction denotes points. The population is registered members in the sampling frame. Nonmembers were not sampled, so the estimate does not establish all residents' support.

Sound conclusion or proposed method. Relevant supporting steps or textual evidence
. Accurate conditions, checks or qualification.

3.2 Random assignment supports a causal comparison of the instruction versions for these participants under the tested conditions, subject to variation. Volunteer selection limits population generalisation. It does not establish that every future user will finish faster.

Sound conclusion or proposed method. Relevant supporting steps or textual evidence.
Accurate conditions, checks or qualification.

3.3 People choosing to respond can differ systematically from those who do not. A margin for sampling variability does not remove that bias. Select randomly from the defined target population and follow up nonresponse; still report limitations.

Sound conclusion or proposed method. Relevant supporting steps or textual evidence.
Accurate conditions, checks or qualification.