Sampling, Surveys & Margin of Error · 1

A principal enters every student's name into a computer, which randomly selects 50 names to survey. Which sampling method is used? (A) cluster sample (B) simple random sample (C) systematic sample (D) stratified random sample

Sampling, Surveys & Margin of Error · 2

Surveys are mailed to 1,000 randomly chosen households, but only 120 are returned. Which kind of bias is most likely? (A) voluntary response bias (B) response bias (C) undercoverage (D) nonresponse bias

Sampling, Surveys & Margin of Error · 3

A random sample of 1,000 people is surveyed. Estimate the margin of error.

Sampling, Surveys & Margin of Error · 4

In a random sample of 10,000 residents, 43% want a new library. Use the margin of error to give an interval for the percent of all residents who want a new library.

Sampling, Surveys & Margin of Error · 5

About how many people must be surveyed at random for a margin of error of 2%?

Sampling, Surveys & Margin of Error · 6

In a random poll of 400 voters, 58% support Measure A. Using $E \approx 1 \div \sqrt{n}$, can the pollster be confident that a majority (more than 50%) of all voters support it? Answer yes or no.

Sampling, Surveys & Margin of Error · 7

A survey asks, "Don't you agree that the unfair new curfew should be removed?" Which kind of bias is most likely? (A) nonresponse bias (B) response bias (C) undercoverage (D) voluntary response bias

Sampling, Surveys & Margin of Error · 8

A random sample of 800 people is surveyed. Estimate the margin of error.

Sampling, Surveys & Margin of Error · 2

ANSWER

D

Sampling, Surveys & Margin of Error · 1

ANSWER

B

Sampling, Surveys & Margin of Error · 4

ANSWER

42% to 44%

Sampling, Surveys & Margin of Error · 3

ANSWER

3.2%

Sampling, Surveys & Margin of Error · 6

ANSWER

yes

Sampling, Surveys & Margin of Error · 5

ANSWER

2500

Sampling, Surveys & Margin of Error · 8

ANSWER

3.5%

Sampling, Surveys & Margin of Error · 7

ANSWER

B

A store manager surveys every 10th customer who walks through the door. Which sampling method is used? (A) systematic sample (B) convenience sample (C) simple random sample (D) cluster sample

A survey asks, "Don't you agree that the unfair new curfew should be removed?" Which kind of bias is most likely? (A) voluntary response bias (B) response bias (C) undercoverage (D) nonresponse bias

In a random sample of 625 customers, 64% are happy with their service. Use the margin of error to give an interval for the percent of all customers who are happy with their service.

About how many people must be surveyed at random for a margin of error of 4%?

In a random poll of 400 voters, 53% support Measure A. Using $E \approx 1 \div \sqrt{n}$, can the pollster be confident that a majority (more than 50%) of all voters support it? Answer yes or no.

A survey about school lunches only asks students who buy lunch, not those who bring lunch from home. Which kind of bias is most likely? (A) nonresponse bias (B) undercoverage (C) response bias (D) voluntary response bias

A random sample of 100 people is surveyed. Estimate the margin of error.

A librarian picks every 20th name on an alphabetical list of members, starting at a random name. Which sampling method is used? (A) simple random sample (B) convenience sample (C) cluster sample (D) systematic sample

Sampling, Surveys & Margin of Error · 10

ANSWER

B

Sampling, Surveys & Margin of Error · 9

ANSWER

A

Sampling, Surveys & Margin of Error · 12

ANSWER

625

Sampling, Surveys & Margin of Error · 11

ANSWER

60% to 68%

Sampling, Surveys & Margin of Error · 14

ANSWER

B

Sampling, Surveys & Margin of Error · 13

ANSWER

no

Sampling, Surveys & Margin of Error · 16

ANSWER

D

Sampling, Surveys & Margin of Error · 15

ANSWER

10%

Sampling, Surveys & Margin of Error · 17

A town poll about park improvements is mailed only to homeowners, so renters are left out. Which kind of bias is most likely? (A) nonresponse bias (B) voluntary response bias (C) undercoverage (D) response bias

Sampling, Surveys & Margin of Error · 18

A random sample of 1,500 people is surveyed. Estimate the margin of error.

Sampling, Surveys & Margin of Error · 19

In a random sample of 100 residents, 50% want a new library. Use the margin of error to give an interval for the percent of all residents who want a new library.

Sampling, Surveys & Margin of Error · 20

In a random poll of 625 voters, 52% support Measure A. Using $E \approx 1 \div \sqrt{n}$, can the pollster be confident that a majority (more than 50%) of all voters support it? Answer yes or no.

Sampling, Surveys & Margin of Error · 21

A radio host asks listeners to call in and say whether they support a new stadium. Which kind of bias is most likely? (A) voluntary response bias (B) nonresponse bias (C) undercoverage (D) response bias

Sampling, Surveys & Margin of Error · 22

A random sample of 2,000 people is surveyed. Estimate the margin of error.

Sampling, Surveys & Margin of Error · 23

A principal enters every student's name into a computer, which randomly selects 50 names to survey. Which sampling method is used? (A) simple random sample (B) convenience sample (C) cluster sample (D) stratified random sample

Sampling, Surveys & Margin of Error · 24

A town poll about park improvements is mailed only to homeowners, so renters are left out. Which kind of bias is most likely? (A) undercoverage (B) voluntary response bias (C) response bias (D) nonresponse bias

Sampling, Surveys & Margin of Error · 18

ANSWER

2.6%

Sampling, Surveys & Margin of Error · 17

ANSWER

C

Sampling, Surveys & Margin of Error · 20

ANSWER

no

Sampling, Surveys & Margin of Error · 19

ANSWER

40% to 60%

Sampling, Surveys & Margin of Error · 22

ANSWER

2.2%

Sampling, Surveys & Margin of Error · 21

ANSWER

A

Sampling, Surveys & Margin of Error · 24

ANSWER

A

Sampling, Surveys & Margin of Error · 23

ANSWER

A