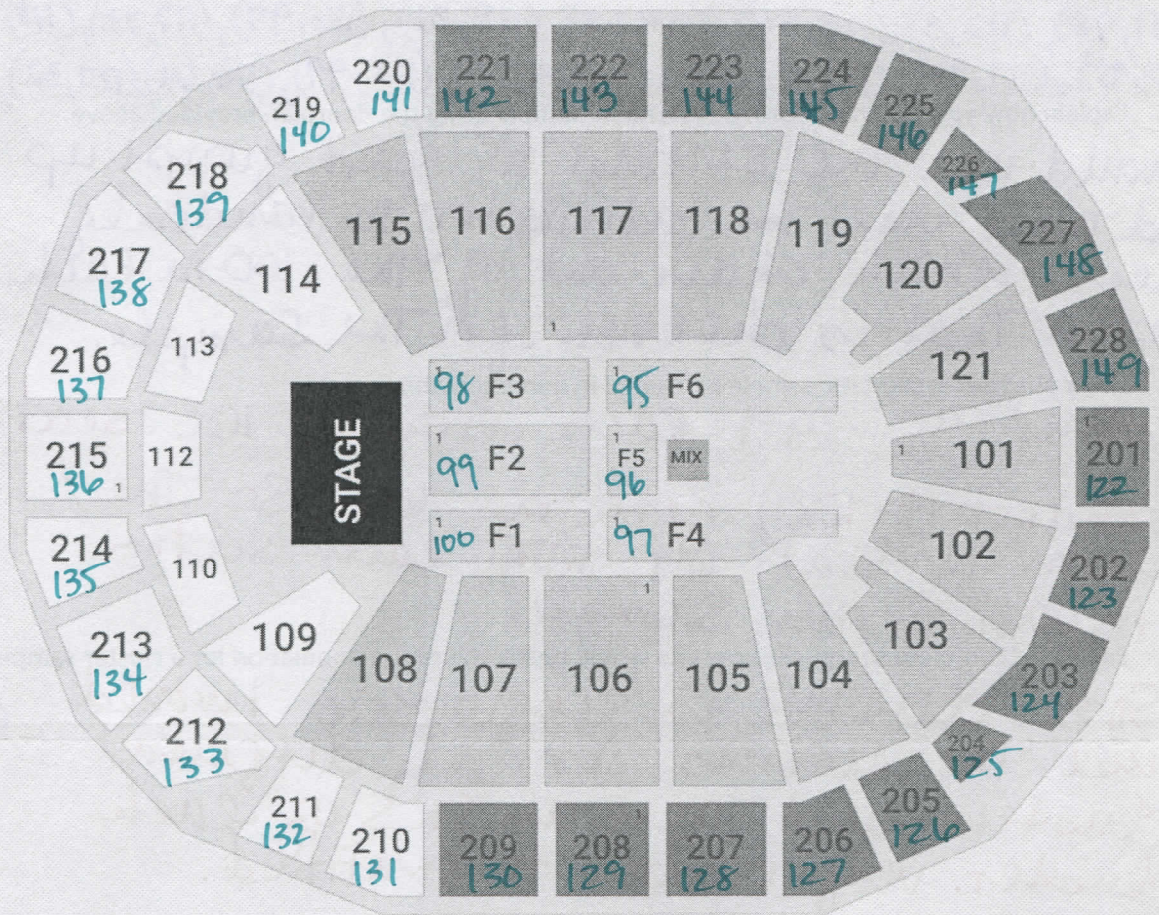


1.2 Sampling Worksheet: Milwaukee Fiserv Stadium



1. Explain how someone could select a simple random sample (SRS) of the Milwaukee Fiserv stadium audience.

- throw all seat numbers into a hat and draw
 - number each seat and use either random generator on calc or computer or digit table

2. Actually simulate your sample explained in number 1. (take 10 samples)

- Not sure how many seats are in each section.
 - So, numbered each section 095 - 149 and randomly drew a section. Then used a calc.

10's: {123, 117, 135, 97, 113, 149, 106, 138, 147, 107}

3. Explain how a statistician would create a stratified random sample of the same audience.

Its a great method and basically done for you.
 either by sections or by levels.
 → Each section is our strata. # each section's seats and SRS within the strata.

4. Actually perform the directions of number 3. (Assume each section has 100 seats)

{(95, 37), (96, 1), (97, 94), (98, 11), (99, 1), (100, 55), (101, 86), (102, 98),
(103, 28), (104, 28), (105, 13), (106, 6), (107, 73), (108, 2), (109, 43), (110, 31),
(111, 98), (112, 9), (113, 84), (114, 62), (115, 21), (116, 99), (117, 73), (118, 31), (119, 25),
(120, 95), (121, 93), (122, 5), (123, 12), (124, 70), (125, 99), (126, 64), (127, 32), (128, 99),
(129, 100),
(130, 10),
(131, 40),
(132, 12),
(133, 25),
(134, 86),
(135, 38),
(136, 60),
(137, 61),
(138, 8),
(139, 2),
(140, 2),
(141, 70),
(142, 71),
(143, 89),
(144, 38),
(145, 12),
(146, 46),
(147, 99),
(148, 70),
(149, 57)}

5. Explain how you would perform a systematic sample using the floorplan provided above.

I would use the sections to split groups up and then use the calculator to randomly select which chair out of the 100 in each section that is chosen for the sample.

6. Carry out your systematic sample explained in number 6 above.

sections 95-149 each with 1-100 seats

random (1-100) gave me 64. So, the person in seat 64 from each section is part of my sample.

7. Explain in complete sentences how you would divide the entire population for a cluster sample.

Since cluster is geographic I would use the sections as my different clusters and then an SRS of each cluster. very similar to stratified.

8. Would your design of the clusters in number 7 change depending on what ^{was} being held at the stadium: concert, game, speaker, etc. Justify your answer.

Yes, if there was a stage I would eliminate some sections behind the stage. If a sporting event I would get rid of seats in the middle of the floor.

9. Give a brief step by step explanation of how you would use multistage sampling for the stadium seating chart. Your steps should explain how and why your clusters were created.

Same as stratified or cluster sampling.

10. What would be the easiest convenience sampling method for a stadium?

standing at one door handing out fliers until they are gone.