

STAT165 / 265: Forecasting

Discussion 3: Reference Class Group Exercises

2/7/2025

You will work through this sheet in class on Friday, 2/7 in groups of 2-3. In the first question, you'll brainstorm what reference classes might be helpful to look up. In the second question, you'll reflect on your past forecast on one of the homework problems and discuss with your group. In the third question, you'll use reference class information: we provide you with reference class information for one of the forecasting questions on the upcoming homework (HW3 Q2), and you'll discuss how to use information to help you come up with a forecast.

Please submit the Discussion sheet for participation points on Gradescope under the "Discussion 3 Worksheet" assignment. Submit what you have at the end of the hour – it's ok if you didn't finish every question thoroughly!

For students who will be absent this Friday, please recall that you have two discussion drops this semester.

Q1: For each of the following questions, brainstorm 3 reference classes that you would use to answer it:

- (a) In the 2016 Summer Olympics, how many medals did the US win by the end of the day on August 9th 2016? (The 2016 Summer Olympics took place in Brazil from August 5th 2016 to August 21st 2016.)
- (b) What will the Rotten Tomatoes rating (i.e the average tomatometer) be for Season 4 of All of Mankind on March 31st, 2024? All of Mankind is an Apple TV+ series; Season 1 was released in Nov 2019, Season 2 in Feb 2021, Season 3 in June 2022, and Season 4 in Nov 2023.

Q2: Reflect on your forecast for HW1 Q1 (*How many people will be in lecture at 4:15pm on Wednesday, January 24th?*). Discuss what approaches you used, how you did, and what lessons you learned. (Note that the answer was resolved to be 75 based on a count by course staff.)

Q3: Consider the following forecasting question from HW3: *How many three-pointers will Steph Curry **attempt** in the February 10th NBA game between the Golden State Warriors and the Phoenix Suns? (HW3 Q2). (As usual, come up with an 80% confidence interval.)*

We provide reference class information on the next page. Discuss how you would use this reference class information to come up with a forecast, and any other sources you would want to consult later.

Reference Class Information

Here are a few figures that could be useful to come up with a base rate.

Steph Curry's statistics for three-pointers by season

3P% = 3 pointer percentage (fraction of attempted three pointers that were made)

GP = games played

PPG = points per game

3PA = three pointers attempted

	NAME	SEASON	TM	GP	3P%	MPG	PPG	RPG	APG	SPG	BPG	TPG	FGM	FGA	FG%	3PM	3PA
	Stephen Curry	2009-10		80	43.7	36.2	17.5	4.5	5.9	1.9	0.2	3.0	6.6	14.3	46.2	2.1	4.8
	Stephen Curry	2010-11		74	44.2	33.6	18.6	3.9	5.8	1.5	0.3	3.1	6.8	14.2	48.0	2.0	4.6
	Stephen Curry	2011-12		26	45.5	28.2	14.7	3.4	5.3	1.5	0.3	2.5	5.6	11.4	49.0	2.1	4.7
	Stephen Curry	2012-13		78	45.3	38.2	22.9	4.0	6.9	1.6	0.2	3.1	8.0	17.8	45.1	3.5	7.7
	Stephen Curry	2013-14		78	42.4	36.5	24.0	4.3	8.5	1.6	0.2	3.8	8.4	17.7	47.1	3.3	7.9
	Stephen Curry	2014-15		80	44.3	32.7	23.8	4.3	7.7	2.0	0.2	3.1	8.2	16.8	48.7	3.6	8.1
	Stephen Curry	2015-16		79	45.4	34.2	30.1	5.4	6.7	2.1	0.2	3.3	10.2	20.2	50.4	5.1	11.2
	Stephen Curry	2016-17		79	41.1	33.4	25.3	4.5	6.6	1.8	0.2	3.0	8.5	18.3	46.8	4.1	10.0
	Stephen Curry	2017-18		51	42.3	32.0	26.4	5.1	6.1	1.6	0.2	3.0	8.4	16.9	49.5	4.2	9.8
	Stephen Curry	2018-19		69	43.7	33.8	27.3	5.3	5.2	1.3	0.4	2.8	9.2	19.4	47.2	5.1	11.7
	Stephen Curry	2019-20		5	24.5	27.8	20.8	5.2	6.6	1.0	0.4	3.2	6.6	16.4	40.2	2.4	9.8
	Stephen Curry	2020-21		63	42.1	34.2	32.0	5.5	5.8	1.2	0.1	3.4	10.4	21.7	48.2	5.3	12.7
	Stephen Curry	2021-22		64	38.0	34.5	25.5	5.2	6.3	1.3	0.4	3.2	8.4	19.1	43.7	4.5	11.7
	Stephen Curry	2022-23		56	42.7	34.7	29.4	6.1	6.3	0.9	0.4	3.2	10.0	20.2	49.3	4.9	11.4
	Stephen Curry	2023-24		40	40.3	33.5	27.3	4.2	5.0	0.9	0.4	3.0	8.8	19.5	44.9	4.7	11.6

Steph Curry's statistics for games against the Suns

Stephen Curry vs. Phoenix Suns: Game Logs [Export Data](#) [Glossary](#)

Regular Season		Rk	Date	Age	Team	Opp	Result	GS	MP	FG	FGA	FG%	2P	2PA	2P%	3P	3PA	3P%	FT	FTA	FT%	TS%	ORB	DRB	TRB	AST	STL	BLK	TOV	PF	PTS	GmSc	BPM
1	2023-12-12	35-273	GSW	@	PHO	L 116-119	*	32	8	24	.333	4	9	.444	4	15	.267	4	4	1.000	.466	0	5	5	4	3	0	1	2	24	15.9	3.8	
2	2023-11-22	35-253	GSW	@	PHO	L 115-123	*	28	6	15	.400	5	7	.714	1	8	.125	3	3	1.000	.490	0	3	3	6	0	0	2	2	16	10.2	-3.1	
3	2023-10-24	35-224	GSW		PHO	L 104-108	*	31	8	20	.400	4	6	.667	4	14	.286	7	7	1.000	.585	1	4	5	1	1	0	2	5	27	15.8	6.0	
4	2023-03-13	34-364	GSW		PHO	W 123-112	*	33	7	13	.538	3	7	.429	4	6	.667	5	6	.833	.735	2	5	7	5	0	0	5	4	23	16.1	0.0	
5	2023-01-10	34-302	GSW		PHO	L 113-125	*	31	8	22	.364	3	7	.429	5	15	.333	3	4	.750	.505	1	0	1	3	1	0	1	4	24	12.6	0.3	
6	2022-11-16	34-247	GSW	@	PHO	L 119-130	*	36	17	28	.607	10	17	.588	7	11	.636	9	9	1.000	.782	0	9	9	6	0	1	3	2	50	41.0	20.7	
7	2022-10-25	34-225	GSW	@	PHO	L 105-134	*	30	7	17	.412	3	8	.375	4	9	.444	3	5	.600	.547	0	7	7	8	1	0	1	1	21	18.4	8.9	
8	2021-12-25	33-286	GSW	@	PHO	W 116-107	*	37	10	27	.370	5	11	.455	5	16	.313	8	9	.889	.533	0	4	4	6	3	1	1	3	33	24.6	7.6	
9	2021-12-03	33-264	GSW		PHO	W 118-96	*	33	8	20	.400	2	9	.222	6	11	.545	1	2	.500	.551	2	3	5	5	0	0	3	2	23	13.8	1.8	
10	2021-11-30	33-261	GSW	@	PHO	L 96-104	*	36	4	21	.190	1	7	.143	3	14	.214	1	1	1.000	.280	1	2	3	2	1	1	2	0	12	1.3	-9.0	
11	2021-05-11	33-058	GSW		PHO	W 122-116	*	37	7	22	.318	6	11	.545	1	11	.091	6	6	1.000	.426	0	3	3	6	1	0	3	2	21	10.7	-7.9	
12	2021-01-28	32-320	GSW	@	PHO	L 93-114	*	31	10	20	.500	5	10	.500	5	10	.500	2	2	1.000	.647	1	3	4	4	0	0	4	2	27	16.6	8.3	
13	2019-10-30	31-230	GSW		PHO	L 110-121	*	21	3	11	.273	2	4	.500	1	7	.143	2	2	1.000	.379	0	5	5	6	1	2	4	2	9	5.8	-3.3	
14	2019-03-10	30-361	GSW		PHO	L 111-115	*	35	6	20	.300	2	5	.400	4	15	.267	2	2	1.000	.431	0	7	7	8	3	1	3	4	18	13.2	1.7	
15	2019-02-08	30-331	GSW	@	PHO	W 117-107	*	36	6	17	.353	3	6	.500	3	11	.273	5	6	.833	.509	0	7	7	7	1	1	2	5	20	14.8	0.3	
16	2018-12-31	30-292	GSW	@	PHO	W 132-109	*	32	11	17	.647	6	8	.750	5	9	.556	7	7	1.000	.847	1	8	9	4	1	0	3	2	34	29.6	13.0	
17	2018-10-22	30-222	GSW		PHO	W 123-103	*	30	11	18	.611	5	5	1.000	6	13	.462	1	2	.500	.768	0	4	4	8	2	0	3	0	29	26.2	17.2	
18	2018-02-12	29-335	GSW		PHO	W 129-83	*	30	8	17	.471	5	8	.625	3	9	.333	3	3	1.000	.600	2	7	9	7	0	1	3	3	22	18.2	2.1	
19	2017-04-05	29-022	GSW	@	PHO	W 120-111	*	35	15	25	.600	7	13	.538	8	12	.667	4	7	.571	.748	0	4	4	11	2	2	3	0	42	38.6	23.7	
20	2016-12-03	28-264	GSW		PHO	W 138-109	*	30	10	15	.667	5	8	.625	5	7	.714	6	6	1.000	.879	0	2	2	1	1	0	3	2	31	23.0	6.4	
21	2016-11-13	28-244	GSW		PHO	W 133-120	*	37	9	17	.529	4	8	.500	5	9	.556	7	7	1.000	.747	0	6	6	6	2	0	3	2	30	25.9	7.0	
22	2016-10-30	28-230	GSW	@	PHO	W 106-100	*	34	9	17	.529	4	9	.444	5	8	.625	5	5	1.000	.729	0	1	1	3	0	0	1	5	28	19.1	8.9	
23	2016-03-12	27-364	GSW		PHO	W 123-116	*	35	12	24	.500	5	8	.625	7	16	.438	4	4	1.000	.679	1	2	3	6	0	0	1	4	35	25.9	8.4	
24	2016-02-10	27-333	GSW	@	PHO	W 112-104	*	30	9	17	.529	4	7	.571	5	10	.500	3	4	.750	.693	5	4	9	9	1	1	2	1	26	27.6	19.6	
25	2015-12-16	27-277	GSW		PHO	W 128-103	*	30	10	14	.714	8	9	.889	2	5	.400	3	5	.600	.772	0	2	2	7	1	0	3	4	25	20.3	6.5	
26	2015-11-27	27-258	GSW	@	PHO	W 135-116	*	31	11	20	.550	2	4	.500	9	16	.563	10	11	.909	.825	1	5	6	8	2	0	6	2	41	34.0	17.5	
27	2015-04-02	27-019	GSW		PHO	W 107-106	*	34	10	22	.455	4	11	.364	6	11	.545	2	2	1.000	.612	1	7	8	5	0	0	6	3	28	15.7	2.3	
28	2015-03-09	26-360	GSW	@	PHO	W 98-80	*	36	14	24	.583	7	11	.636	7	13	.538	1	2	.500	.723	3	3	6	5	4	0	4	3	36	29.7	23.8	
29	2015-01-31	26-323	GSW		PHO	W 106-87	*	37	9	23	.391	5	14	.357	4	9	.444	3	3	1.000	.514	1	3	4	7	2	1	1	2	25	19.9	8.6	
30	2014-11-09	26-240	GSW	@	PHO	L 95-107	*	34	10	20	.500	6	10	.600	4	10	.400	4	4	1.000	.643	0	2	2	10	5	0	10	5	28	18.6	7.4	
31	2014-03-09	25-360	GSW		PHO	W 113-107	*	30	7	16	.438	6	11	.545	1	5	.200	3	3	1.000	.520	0	2	2	9	0	0	1	1	18	15.1	2.0	
32	2014-02-08	25-331	GSW	@	PHO	L 109-122	*	41	10	20	.500	7	10	.700	3	10	.300	5	6	.833	.618	1	1	2	9	0	0	2	2	28	22.1	5.6	
33	2013-12-27	25-288	GSW		PHO	W 115-86	*	34	5	17	.294	4	11	.364	1	6	.167	3	5	.600	.365	3	10	13	16	1	0	7	3	14	12.4	-1.8	
34	2013-12-15	25-276	GSW	@	PHO	L 102-106	*	42	8	17	.471	4	10	.400	4	7	.571	10	11	.909	.687	0	6	6	7	3	0	6	2	30	23.8	9.7	
35	2013-04-05	25-022	GSW	@	PHO	W 111-107	*	41	6	15	.400	3	7	.429	3	8	.375	3	3	1.000	.551	0	1	1	15	4	0	4	5	18	18.7	4.7	
36	2013-02-20	24-343	GSW		PHO	W 108-98	*	41	8	16	.500	6	10	.600	2	6	.333	2	2	1.000	.592	0	3	3	11	1	0	2	1	20	19.2	3.4	
37	2013-02-02	24-325	GSW		PHO	W 113-93	*	42	11	20	.550	5	10	.500	6	10	.600	1	1	1.000	.709	0	2	2	8	2	0	2	3	29	24.4	10.9	
38	2012-10-31	24-231	GSW	@	PHO	W 87-85	*	30	2	14	.143	2	8	.250	0	6	.000	1	3	.333	.163	3	4	7	3	2	0	4	3	5	-2.6	-12.6	
39	2012-02-22	23-345	GSW	@	PHO	W 106-104	*	10	3	7	.429	2	4	.500	1	3	.333	2	2	1.000	.571	0	0	0	2	2	0	1	1	9	7.3	17.3	
40	2012-02-13	23-336	GSW		PHO	W 102-96	*	32	3	10	.300	2	6	.333	1	4	.250	2	2	1.000	.414	2	5	7	5	1	0	2	2	9	7.8	-2.9	
41	2012-01-02	23-294	GSW	@	PHO	L 91-102	*	23	4	8	.500	2	5	.400	2	3	.667	0	0		.625	0	2	2	2	1	0	2	5	10	5.0	-4.7	
42	2011-03-18	23-004	GSW	@	PHO	L 97-108	*	35	6	13	.462	4	8	.500	2	5	.400	1	1	1.000	.558	1	1	2	5	0	0	2	3	15	9.6	-0.3	
43	2011-02-10	22-333	GSW	@	PHO	L 88-112	*	25	5	9	.556	3	6	.500	2	3	.667	0	0		.667	0	2	2	2	1	0	4	0	12	6.7	-3.7	
44	2011-02-07	22-330	GSW		PHO	L 92-104	*	44	7	17	.412	7	11	.636	0	6	.000	1	1	1.000	.430	0	2	2	8	1	0	5	1	15	7.7	-6.1	
45	2010-12-02	22-263	GSW		PHO	L 101-107	*	34	4	10	.400	3	7	.429	1	3	.333	0	0		.450	1	0	1	7	4	0	4	4	9	7.6	-3.4	
46	2010-03-22	22-008	GSW		PHO	L 131-133	*	34	6	15	.400	4	10	.400	2	5	.400	0	0		.467	1	3	4	8	4	0	1	4	14	14.5	2.8	
47	2010-01-23	21-315	GSW	@	PHO	L																											

Steph Curry's recent game statistics

3M-3A= number of 3-pointers made-number of 3-pointers attempted

SEASON 2023-2024

Game by game stats for Stephen Curry

Regular

GAME	DATE	SCORE	PTS	REB	AST	MIN	2M-2A	3M-3A	FG%	1M-1A	1%	OR	DR	REB	AST	STL	TO	BLK	PTS	EFF
vs Phoenix Suns	Oct 25, 2023	L 104-108	27	5	1	31	4-6	4-14	40.0%	7-7	100.0%	1	4	5	1	1	2	0	27	20
@ Sacramento Kings	Oct 28, 2023	W 114-122	41	4	4	35	7-9	7-10	73.7%	6-6	100.0%	1	3	4	4	2	4	0	41	42
@ Houston Rockets	Oct 30, 2023	W 95-106	24	7	6	31	0-2	6-14	37.5%	6-6	100.0%	1	6	7	6	0	1	1	24	27
@ New Orleans Pelicans	Oct 31, 2023	W 102-130	42	5	5	30	8-9	7-13	68.2%	5-7	71.4%	0	5	5	5	2	3	0	42	42
vs Sacramento Kings	Nov 2, 2023	W 102-101	21	5	3	32	3-5	4-10	46.7%	3-3	100.0%	1	4	5	3	0	7	0	21	14
@ Oklahoma City Thunder	Nov 4, 2023	W 139-141	30	8	7	31	4-5	5-10	60.0%	7-7	100.0%	3	5	8	7	2	3	0	30	38
@ Cleveland Cavaliers	Nov 6, 2023	L 115-104	28	2	4	31	1-5	7-11	50.0%	5-6	83.3%	0	2	2	4	1	6	0	28	20
@ Detroit Pistons	Nov 7, 2023	W 109-120	34	2	4	33	5-9	7-17	46.2%	3-4	75.0%	0	2	2	4	0	3	0	34	22
@ Denver Nuggets	Nov 9, 2023	L 108-105	23	5	4	34	0-4	6-13	35.3%	5-5	100.0%	1	4	5	4	1	3	0	23	19
vs Cleveland Cavaliers	Nov 12, 2023	L 110-118	30	3	2	33	5-10	4-14	37.5%	8-8	100.0%	1	2	3	2	1	4	1	30	18
vs Minnesota Timberwolves	Nov 13, 2023	L 110-116	38	5	3	36	6-12	5-13	44.0%	11-12	91.7%	1	4	5	3	1	5	0	38	27
vs Oklahoma City Thunder	Nov 19, 2023	L 123-130	25	7	3	40	3-10	5-11	38.1%	4-4	100.0%	0	7	7	3	0	2	0	25	20
vs Houston Rockets	Nov 21, 2023	W 121-116	32	5	1	35	3-5	5-9	57.1%	11-12	91.7%	0	5	5	1	0	4	0	32	27
@ Phoenix Suns	Nov 23, 2023	L 123-115	16	3	6	28	5-7	1-8	40.0%	3-3	100.0%	0	3	3	6	0	2	0	16	14
vs San Antonio Spurs	Nov 25, 2023	W 118-112	35	3	6	35	4-7	7-13	55.0%	6-6	100.0%	0	3	3	6	1	6	0	35	30
@ Sacramento Kings	Nov 29, 2023	L 124-123	29	10	6	37	4-8	4-12	40.0%	9-9	100.0%	3	7	10	6	0	5	1	29	29
vs LA Clippers	Dec 1, 2023	W 120-114	26	7	8	33	5-6	3-9	53.3%	7-9	77.8%	0	7	7	8	1	2	1	26	32
@ LA Clippers	Dec 2, 2023	L 113-112	22	4	11	37	3-9	4-9	38.9%	4-4	100.0%	1	3	4	11	0	2	0	22	24
vs Portland Trail Blazers	Dec 7, 2023	W 110-106	31	5	1	34	3-5	5-13	44.4%	10-11	90.9%	0	5	5	1	0	4	0	31	22
@ Oklahoma City Thunder	Dec 9, 2023	L 138-136	34	6	3	40	4-8	6-12	50.0%	8-8	100.0%	0	6	6	3	1	3	0	34	31
@ Phoenix Suns	Dec 13, 2023	L 119-116	24	5	4	32	4-9	4-15	33.3%	4-4	100.0%	0	5	5	4	3	1	0	24	19
@ LA Clippers	Dec 15, 2023	L 121-113	17	4	4	34	2-4	3-13	29.4%	4-4	100.0%	0	4	4	4	0	1	0	17	12
vs Brooklyn Nets	Dec 17, 2023	W 124-120	37	3	1	35	8-14	6-8	63.6%	3-3	100.0%	0	3	3	1	0	3	3	37	33
@ Portland Trail Blazers	Dec 18, 2023	W 114-118	7	2	8	31	2-4	0-8	16.7%	3-4	75.0%	0	2	2	8	1	4	1	7	4
vs Boston Celtics	Dec 20, 2023	W 132-126	33	3	6	38	5-10	6-11	52.4%	5-5	100.0%	0	3	3	6	0	4	0	33	28
vs Washington Wizards	Dec 23, 2023	W 129-118	30	4	7	27	1-5	8-13	50.0%	4-5	80.0%	0	4	4	7	0	2	1	30	30
vs Portland Trail Blazers	Dec 24, 2023	W 126-106	27	3	2	30	9-11	2-7	61.1%	3-3	100.0%	0	3	3	2	0	1	0	27	24
@ Denver Nuggets	Dec 25, 2023	L 120-114	18	2	4	34	4-8	3-13	33.3%	1-1	100.0%	1	1	2	4	1	3	1	18	9
vs Miami Heat	Dec 29, 2023	L 102-114	13	4	5	32	1-7	2-8	20.0%	5-6	83.3%	0	4	4	5	2	1	1	13	11
vs Dallas Mavericks	Dec 31, 2023	L 122-132	25	2	7	35	3-10	6-15	36.0%	1-1	100.0%	0	2	2	7	1	3	0	25	16
vs Orlando Magic	Jan 3, 2024	W 121-115	36	2	6	35	8-11	4-9	60.0%	8-11	72.7%	1	1	2	6	4	2	1	36	36
vs Denver Nuggets	Jan 5, 2024	L 127-130	30	4	6	35	6-11	5-12	47.8%	3-3	100.0%	0	4	4	6	1	2	1	30	28
vs Detroit Pistons	Jan 6, 2024	W 113-109	26	6	4	31	3-7	4-12	36.8%	8-9	88.9%	0	6	6	4	1	4	1	26	21
vs Toronto Raptors	Jan 8, 2024	L 118-133	9	1	6	30	2-5	0-9	14.3%	5-5	100.0%	0	1	1	6	0	2	0	9	2
vs New Orleans Pelicans	Jan 11, 2024	L 105-141	15	1	6	25	1-5	3-8	30.8%	4-4	100.0%	0	1	1	6	1	3	0	15	11
@ Chicago Bulls	Jan 13, 2024	W 131-140	27	5	9	35	2-9	6-15	33.3%	5-5	100.0%	0	5	5	9	1	1	0	27	25
@ Memphis Grizzlies	Jan 16, 2024	L 116-107	26	4	8	33	8-11	3-9	55.0%	1-1	100.0%	1	3	4	8	2	5	1	26	27
vs Atlanta Hawks	Jan 25, 2024	W 134-112	25	3	8	31	2-8	5-8	43.8%	6-6	100.0%	0	3	3	8	0	1	0	25	26
vs Sacramento Kings	Jan 26, 2024	L 133-134	33	6	2	36	7-12	6-14	50.0%	1-1	100.0%	1	5	6	2	1	2	0	33	27
vs Los Angeles Lakers	Jan 28, 2024	L 144-145	46	3	7	43	8-14	9-21	48.6%	3-3	100.0%	0	3	3	7	1	4	0	46	35