

STAT 157/260: Forecasting

Reference Class Group Exercises

2/3/2022

You will work through this sheet in class on Friday, 2/3 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" 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 have contacted us about absences this Friday, please spend an hour on this sheet and submit to the same Gradescope assignment.

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 2 of Ginny & Georgia on March 31st, 2023? (Ginny & Georgia is a Netflix TV series; Season 1 was released on February 24th, 2021 and Season 2 was released on January 5th, 2023.)

Q2: Reflect on your forecast for HW2 Q3 (*How many club tables will be there at 1PM on Upper Sproul on February 1st?*). Discuss what approaches you used, how you did, and what lessons you learned. (Note that the answer was resolved to be 59 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 11th NBA game between the Golden State Warriors and the Los Angeles Lakers? (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



















































































































	NAME	SEASON	TM	GP	3P%	MPG	PPG	RPG	APG	SPG	BPG	TPG
	Stephen Curry	2009-10	 GSW	80	43.7	36.2	17.5	4.5	5.9	1.9	0.2	3.0
	Stephen Curry	2010-11	 GSW	74	44.2	33.6	18.6	3.9	5.8	1.5	0.3	3.1
	Stephen Curry	2011-12	 GSW	26	45.5	28.2	14.7	3.4	5.3	1.5	0.3	2.5
	Stephen Curry	2012-13	 GSW	78	45.3	38.2	22.9	4.0	6.9	1.6	0.2	3.1
	Stephen Curry	2013-14	 GSW	78	42.4	36.5	24.0	4.3	8.5	1.6	0.2	3.8
	Stephen Curry	2014-15	 GSW	80	44.3	32.7	23.8	4.3	7.7	2.0	0.2	3.1
	Stephen Curry	2015-16	 GSW	79	45.4	34.2	30.1	5.4	6.7	2.1	0.2	3.3
	Stephen Curry	2016-17	 GSW	79	41.1	33.4	25.3	4.5	6.6	1.8	0.2	3.0
	Stephen Curry	2017-18	 GSW	51	42.3	32.0	26.4	5.1	6.1	1.6	0.2	3.0
	Stephen Curry	2018-19	 GSW	69	43.7	33.8	27.3	5.3	5.2	1.3	0.4	2.8
	Stephen Curry	2019-20	 GSW	5	24.5	27.8	20.8	5.2	6.6	1.0	0.4	3.2
	Stephen Curry	2020-21	 GSW	63	42.1	34.2	32.0	5.5	5.8	1.2	0.1	3.4
	Stephen Curry	2021-22	 GSW	64	38.0	34.5	25.5	5.2	6.3	1.3	0.4	3.2
	Stephen Curry	2022-23	 GSW	36	42.7	34.8	29.7	6.4	6.4	1.0	0.4	3.2
Total					42.8	34.4	24.5	4.7	6.5	1.6	0.2	3.1
Average					42.8	34.4	24.5	4.7	6.5	1.6	0.2	3.1

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





































GP = games played

PPG = points per game

Steph Curry's statistics for games against the Lakers

NAME	DATE	TM	OPP	MIN	PTS	REB	AST	STL	BLK	TOV	FGM	FGA	FG%	3PM	3PA	3P%	FTM	FTA	FT%	PF	+/-
 Stephen Curry	11/28/2009	 GSW	vs  LAL	36	13	4	8	0	0	1	5	15	33.3	1	5	20.0	2	2	100.0	0	-23
 Stephen Curry	12/29/2009	 GSW	@  LAL	23	15	3	3	0	0	4	6	10	60.0	0	1	0.0	3	3	100.0	3	-7
 Stephen Curry	2/16/2010	 GSW	@  LAL	44	11	10	8	1	0	4	5	21	23.8	1	10	10.0	0	0		5	-4
 Stephen Curry	3/15/2010	 GSW	vs  LAL	34	29	5	9	1	0	0	11	19	57.9	5	9	55.6	2	2	100.0	4	-9
 Stephen Curry	11/21/2010	 GSW	@  LAL	24	13	3	2	1	2	0	5	10	50.0	1	3	33.3	2	2	100.0	3	-26
 Stephen Curry	1/12/2011	 GSW	vs  LAL	38	15	4	10	2	0	3	5	12	41.7	1	6	16.7	4	4	100.0	3	+2
 Stephen Curry	4/6/2011	 GSW	vs  LAL	42	20	6	5	2	0	2	8	23	34.8	2	6	33.3	2	2	100.0	3	+2
 Stephen Curry	11/9/2012	 GSW	@  LAL	30	18	3	5	1	0	0	6	16	37.5	2	6	33.3	4	4	100.0	0	-19
 Stephen Curry	12/22/2012	 GSW	vs  LAL	45	20	8	7	4	0	4	8	23	34.8	3	10	30.0	1	1	100.0	4	+6
 Stephen Curry	3/25/2013	 GSW	vs  LAL	43	25	7	10	0	0	2	9	24	37.5	3	9	33.3	4	7	57.1	4	+3
 Stephen Curry	4/12/2013	 GSW	@  LAL	44	47	6	9	3	0	1	17	31	54.8	9	15	60.0	4	4	100.0	3	+3
 Stephen Curry	10/30/2013	 GSW	vs  LAL	24	10	4	6	1	0	1	4	10	40.0	2	5	40.0	0	0		4	+28
 Stephen Curry	12/21/2013	 GSW	vs  LAL	33	18	6	10	3	0	1	5	15	33.3	4	9	44.4	4	4	100.0	2	+26
 Stephen Curry	4/11/2014	 GSW	@  LAL	35	30	10	12	2	0	6	12	20	60.0	4	5	80.0	2	2	100.0	3	+13
 Stephen Curry	11/1/2014	 GSW	vs  LAL	34	31	5	10	3	0	2	10	19	52.6	3	8	37.5	8	8	100.0	3	+30
 Stephen Curry	11/16/2014	 GSW	@  LAL	30	30	4	15	1	0	3	10	19	52.6	5	9	55.6	5	5	100.0	0	+27
 Stephen Curry	12/23/2014	 GSW	@  LAL	30	22	2	6	3	0	7	10	14	71.4	2	5	40.0	0	0		0	-10
 Stephen Curry	3/16/2015	 GSW	vs  LAL	33	19	4	9	3	0	6	5	14	35.7	2	6	33.3	7	7	100.0	2	-2
 Stephen Curry	11/24/2015	 GSW	vs  LAL	30	24	4	9	2	0	0	10	21	47.6	4	12	33.3	0	0		1	+36
 Stephen Curry	1/5/2016	 GSW	@  LAL	26	17	1	6	3	0	3	6	13	46.2	4	8	50.0	1	1	100.0	2	+28
 Stephen Curry	1/14/2016	 GSW	vs  LAL	30	26	6	3	1	0	3	9	18	50.0	8	16	50.0	0	0		3	+14
 Stephen Curry	3/6/2016	 GSW	@  LAL	34	18	6	4	1	0	4	6	20	30.0	1	10	10.0	5	5	100.0	2	-8
 Stephen Curry	11/4/2016	 GSW	@  LAL	31	13	8	10	2	1	2	5	17	29.4	0	10	0.0	3	3	100.0	3	-5
 Stephen Curry	11/23/2016	 GSW	vs  LAL	29	31	5	9	1	0	1	11	18	61.1	7	12	58.3	2	2	100.0	1	+32
 Stephen Curry	11/25/2016	 GSW	@  LAL	36	24	5	5	3	0	3	8	17	47.1	4	10	40.0	4	4	100.0	1	+14
 Stephen Curry	4/12/2017	 GSW	vs  LAL	28	20	5	8	2	0	6	6	17	35.3	5	14	35.7	3	4	75.0	1	+27
 Stephen Curry	11/29/2017	 GSW	@  LAL	39	28	5	7	0	0	5	9	20	45.0	3	9	33.3	7	8	87.5	4	+4
 Stephen Curry	12/25/2018	 GSW	vs  LAL	37	15	2	5	1	0	1	5	17	29.4	2	8	25.0	3	3	100.0	5	-9
 Stephen Curry	1/21/2019	 GSW	@  LAL	30	11	5	12	1	0	0	3	12	25.0	2	10	20.0	3	3	100.0	3	+27
 Stephen Curry	2/2/2019	 GSW	vs  LAL	33	14	4	2	0	0	2	5	15	33.3	2	9	22.2	2	3	66.7	2	+13
 Stephen Curry	4/4/2019	 GSW	@  LAL	29	7	10	7	1	0	2	3	14	21.4	1	9	11.1	0	0		1	+32
 Stephen Curry	1/18/2021	 GSW	@  LAL	36	26	1	7	1	0	4	8	22	36.4	3	12	25.0	7	7	100.0	2	-3
 Stephen Curry	2/28/2021	 GSW	@  LAL	26	16	4	7	3	0	3	5	13	38.5	2	7	28.6	4	5	80.0	2	-24
 Stephen Curry	3/15/2021	 GSW	vs  LAL	29	27	3	2	3	0	2	9	17	52.9	4	7	57.1	5	5	100.0	1	-12
 Stephen Curry	10/19/2021	 GSW	@  LAL	36	21	10	10	3	0	4	5	21	23.8	2	8	25.0	9	9	100.0	1	+4
 Stephen Curry	2/12/2022	 GSW	vs  LAL	37	24	5	8	1	0	2	7	17	41.2	1	8	12.5	9	9	100.0	3	+8
 Stephen Curry	3/5/2022	 GSW	@  LAL	36	30	4	1	0	0	4	13	22	59.1	4	9	44.4	0	0		0	-12
 Stephen Curry	10/18/2022	 GSW	vs  LAL	33	33	6	7	4	1	4	10	22	45.5	4	13	30.8	9	9	100.0	1	+20
Average				33.3	21.3	5.1	7.2	1.7	0.1	2.7	7.5	17.6	42.5	3.0	8.6	34.5	3.4	3.6	94.9	2.2	5.9
Total				1,266	811	193	273	64	4	102	284	668	42.5	113	328	34.5	130	137	94.9	85	+226

Steph Curry's recent game statistics

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 Los Angeles Lakers	Oct 19, 2022	W 123-109	33	6	7	33	6-9	4-13	45.5%	9-9	100.0%	1	5	6	7	4	4	1	33	35
 vs Denver Nuggets	Oct 22, 2022	L 123-128	34	5	4	36	5-11	5-11	45.5%	9-9	100.0%	1	4	5	4	0	3	0	34	28
 vs Sacramento Kings	Oct 24, 2022	W 130-125	33	5	2	31	4-10	7-12	50.0%	4-4	100.0%	0	5	5	2	1	2	0	33	28
 @ Phoenix Suns	Oct 26, 2022	L 134-105	21	7	8	30	3-8	4-9	41.2%	3-5	60.0%	0	7	7	8	1	1	0	21	24
 vs Miami Heat	Oct 28, 2022	W 123-110	33	7	9	37	6-8	7-14	59.1%	0-0	-	1	6	7	9	1	3	0	33	38
 @ Detroit Pistons	Oct 30, 2022	L 128-114	32	6	3	35	6-10	4-14	41.7%	8-9	88.9%	0	6	6	3	2	1	0	32	27
 @ Charlotte Hornets	Oct 30, 2022	L 120-113	31	11	6	39	7-9	3-13	45.5%	8-8	100.0%	0	11	11	6	1	2	0	31	35
 @ Miami Heat	Nov 2, 2022	L 116-109	23	13	13	34	3-4	4-10	50.0%	5-5	100.0%	4	9	13	13	1	5	0	23	38
 @ Orlando Magic	Nov 4, 2022	L 130-129	39	3	9	38	5-7	8-15	59.1%	5-5	100.0%	1	2	3	9	0	5	0	39	37
 vs Sacramento Kings	Nov 8, 2022	W 116-113	47	8	8	38	10-12	7-12	70.8%	6-7	85.7%	0	8	8	8	0	0	0	47	55
 vs Cleveland Cavaliers	Nov 12, 2022	W 106-101	40	4	5	34	9-12	6-11	65.2%	4-6	66.7%	0	4	4	5	1	2	0	40	38
 @ Sacramento Kings	Nov 14, 2022	L 122-115	27	6	4	37	6-8	3-9	52.9%	6-6	100.0%	0	6	6	4	1	4	0	27	26
 vs San Antonio Spurs	Nov 15, 2022	W 132-95	16	5	5	27	2-4	3-7	45.5%	3-3	100.0%	1	4	5	5	1	1	0	16	20
 @ Phoenix Suns	Nov 17, 2022	L 130-119	50	9	6	36	10-17	7-11	60.7%	9-9	100.0%	0	9	9	6	0	3	1	50	52
 vs New York Knicks	Nov 19, 2022	W 111-101	24	6	10	34	4-6	5-13	47.4%	1-3	33.3%	0	6	6	10	2	5	0	24	25
 @ Houston Rockets	Nov 21, 2022	W 120-127	33	7	15	37	4-6	7-14	55.0%	4-5	80.0%	0	7	7	15	3	1	2	33	49
 vs LA Clippers	Nov 24, 2022	W 124-107	22	6	9	32	5-10	4-10	45.0%	0-0	-	1	5	6	9	0	1	0	22	25
 vs Utah Jazz	Nov 26, 2022	W 129-118	33	5	4	36	7-10	6-13	56.5%	1-1	100.0%	0	5	5	4	2	5	0	33	29
 @ Minnesota Timberwolves	Nov 27, 2022	W 114-137	25	11	8	33	3-6	4-11	41.2%	7-7	100.0%	1	10	11	8	1	7	0	25	28
 @ Dallas Mavericks	Nov 30, 2022	L 116-113	32	5	5	38	6-10	5-14	45.8%	5-6	83.3%	1	4	5	5	0	4	0	32	24
 vs Chicago Bulls	Dec 3, 2022	W 119-111	19	11	6	33	2-8	4-8	37.5%	3-3	100.0%	0	11	11	6	0	6	1	19	21
 vs Houston Rockets	Dec 4, 2022	W 120-101	30	3	10	35	2-4	8-17	47.6%	2-3	66.7%	0	3	3	10	1	4	1	30	29
 vs Indiana Pacers	Dec 6, 2022	L 104-112	12	4	6	38	1-7	2-10	17.6%	4-4	100.0%	0	4	4	6	1	3	0	12	6
 vs Boston Celtics	Dec 11, 2022	W 123-107	32	6	7	37	6-10	6-11	57.1%	2-2	100.0%	1	5	6	7	0	4	1	32	33
 @ Milwaukee Bucks	Dec 14, 2022	L 128-111	20	6	1	27	3-7	3-10	35.3%	5-5	100.0%	2	4	6	1	1	2	1	20	16
 @ Indiana Pacers	Dec 15, 2022	L 125-119	38	7	7	30	6-9	5-10	57.9%	11-11	100.0%	1	6	7	7	2	3	1	38	44
 vs Phoenix Suns	Jan 11, 2023	L 113-125	24	1	3	31	3-7	5-15	36.4%	3-4	75.0%	1	0	1	3	1	1	0	24	13
 @ San Antonio Spurs	Jan 14, 2023	W 113-144	15	4	3	23	4-5	2-7	50.0%	1-1	100.0%	0	4	4	3	0	0	1	15	17
 @ Chicago Bulls	Jan 15, 2023	L 132-118	20	10	4	34	5-5	3-10	53.3%	1-2	50.0%	0	10	10	4	0	8	1	20	19
 @ Washington Wizards	Jan 16, 2023	W 118-127	41	7	2	38	6-13	6-15	42.9%	11-12	91.7%	1	6	7	2	0	4	0	41	29
 @ Boston Celtics	Jan 20, 2023	L 121-118	29	4	7	43	3-7	6-18	36.0%	5-5	100.0%	0	4	4	7	3	3	2	29	26
 vs Brooklyn Nets	Jan 23, 2023	L 116-120	26	6	7	38	3-8	4-8	43.8%	8-8	100.0%	1	5	6	7	1	5	0	26	26
 vs Memphis Grizzlies	Jan 26, 2023	W 122-120	34	2	3	35	6-11	4-8	52.6%	10-11	90.9%	0	2	2	3	2	3	0	34	28
 vs Toronto Raptors	Jan 28, 2023	W 129-117	35	7	11	39	9-13	4-8	61.9%	5-5	100.0%	0	7	7	11	2	3	0	35	44
 @ Oklahoma City Thunder	Jan 31, 2023	W 120-128	38	8	12	37	4-6	8-14	60.0%	6-6	100.0%	1	7	8	12	0	4	1	38	47
 @ Minnesota Timberwolves	Feb 2, 2023	L 119-114	29	10	3	43	3-9	5-12	38.1%	8-9	88.9%	0	10	10	3	1	4	1	29	26

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