

LLM Prompts and Answers

1. Which player showed the largest improvement in goals or assists during the second half of the season compared to the first half?

Prompt: Using the game-by-game or split-season statistics, identify which player had the greatest increase in either goals or assists from the first half to the second half of the season.

ChatGPT: The player with the **greatest increase in goals** from the first half to the second half of the season was **Emma Ward (#44)**, who improved by **6 goals** (from 12 to 18).

Claude: it doesn't include any individual player statistics, names, or breakdowns of goals and assists by specific players. Without individual player data showing their goals and assists throughout the season, I cannot identify which player had the greatest increase from the first half to the second half of the season.

Gemini: Based on the provided statistics, it is not possible to identify which player had the greatest increase in goals or assists from the first half to the second half of the season. The document contains cumulative statistics for the entire season and a game-by-game log, but it does not provide split-season statistics (e.g., stats for games 1-9 versus games 10-19) or individual player stats for each game. Therefore, a direct comparison of goals or assists between the two halves of the season cannot be made for individual players.

2. Against which opponent did Syracuse record their best offensive performance (most goals scored in a single game)?

Prompt: Look at the Schedule or Team Statistics table. Which opponent did Syracuse score the most goals against in a single match?

ChatGPT: Referring to the Schedule table, Syracuse scored the most goals (21 goals) in a single match against UALBANY on February 7, 2025.

Match: Syracuse vs UALBANY

Result: W 21–9

Goals Scored: 21 (highest in any single game)

Claude: Syracuse scored the most goals against **UAlbany** in a single match, scoring **21 goals** in their season opener on February 7th (W 21-9).

Gemini: Based on the provided team statistics and schedule, Syracuse scored the most goals in a single match against **UAlbany**, with 21 goals. This game took place on February 7 and resulted in a 21-9 victory for Syracuse.

3. Which player had the highest ground ball to turnover ratio?

Prompt: For each player, calculate ground balls divided by turnovers (GB/TO). Who had the highest such ratio?

ChatGPT: The player with the **highest Ground Ball to Turnover ratio (GB/TO)** is **Coco Vandiver (#16)** with a ratio of **11.33** (34 ground balls and only 3 turnovers).

Claude: **Caroline Tinkhaus had the highest GB/TO ratio at 9.00**, meaning she collected 9 ground balls for every turnover she committed.

Gemini: Kaci Benoit had the highest ground balls-to-turnovers ratio with a value of **2.83**.
Asked to correct the answer: The player with the highest ground balls-to-turnovers ratio is **Emma Ward** with a ratio of **20.5**. She had 41 ground balls and 2 turnovers.

4. Which player contributed the largest percentage of team points in wins (only count games Syracuse won)?

Prompt: Based on all games Syracuse won, which player contributed the highest percentage of total team points (goals plus assists) in just the wins? Explain the limitation.

ChatGPT: Based on available season-wide data and assuming consistent performance across games, **Emma Ward (#44)** contributed the **highest estimated percentage of total team points in Syracuse's wins**.

Since we don't have per-game stats, we assume she contributed at a similar rate in the 10 wins. So, **Emma Ward likely contributed ~22% of the team's total points in wins**, which is the **highest on the team**.

Claude: **The limitation:** The player statistics table shows only season totals, not game-by-game breakdowns. To calculate which player contributed the highest percentage of team points specifically in wins, I would need individual player statistics for each game, separated by wins and losses.

What I can calculate instead: I can determine each player's percentage contribution to the team's total points for the entire season:

From the team totals: Syracuse scored 235 goals with 112 assists = 347 total team points for the season.

Gemini: Based on the available data, it is not possible to determine which player contributed the highest percentage of total team points in just the games Syracuse won. The provided statistics document contains a combined team summary for all games, but it does not offer individual player statistics broken down by game outcome (win or loss). The player stats table shows cumulative totals for the entire season, and the game-by-game schedule only lists the final score for each match. Therefore, a calculation of points (goals plus assists) for individual players during only the winning games cannot be performed with the given information. This is the primary limitation of the provided data.

5. Who took the highest number of shots without scoring a goal?

Prompt: Identify the player with the highest number of shots who scored zero goals over the season. Use the Shots (SH) and Goals (G) statistics.

ChatGPT: The player with the **most shots but zero goals** over the season is **Kaci Benoit (#4)** with **2 shots and 0 goals**.

Claude: Kaci Benoit had the highest number of shots (34) among players who scored zero goals over the season.

Gemini: Based on the provided statistics, the player with the highest number of shots who scored zero goals is **Izzy Lahah**. She had **6** shots and **0** goals during the season.

6. Which player had the best "two-way" impact (sum of ground balls, draw controls, and caused turnovers per game)?

Prompt: For each player, add ground balls, draw controls, and caused turnovers, then divide by games played (GP). Who leads in overall two-way impact per game?

ChatGPT: The player with the **highest overall two-way impact per game** is **Meghan Rode (#28)** with an impact score of **4.47** — driven primarily by her **75 draw controls**.

Claude: **Natalie Carter leads in overall two-way impact per game with 3.83**, followed closely by Alexa Vogelman at 3.29 and Kaci Benoit at 3.21.

Gemini: **Coco Vandiver** actually leads in overall two-way impact per game with a value of **4.05**.

7. If Syracuse improved their shot percentage by 5%, how many additional goals would they have scored this season?

Prompt: Using team shot and goal statistics, estimate how many more goals Syracuse would have had if their shooting percentage were 5% higher, with the same number of shot attempts.

ChatGPT: If Syracuse had a **5% higher shooting percentage**, keeping the same number of shots, they would have scored **approximately 27 more goals** over the season.

Claude: So if Syracuse maintained the same 538 shot attempts but improved their shooting percentage by 5 percentage points (from 43.68% to 48.68%), they would have scored approximately **27 additional goals** over the season.

Gemini: To estimate the number of additional goals, you multiply the new shooting percentage by the total number of shot attempts:

$$(538 \text{ shots} \times 0.487) - 235 \text{ goals} = 262.066 - 235 = 27.066$$

Rounding to the nearest whole number, this means they would have scored approximately 27 more goal

8. Suppose the player with the most turnovers reduced their turnovers by half. What would be the new team total for turnovers?

Prompt: Identify the player with the most turnovers. If they cut their turnovers in half, what would be the updated team turnover total for the season?

ChatGPT: The player with the **most turnovers** is **Emma Ward (#44)** with **41 turnovers**.

If she cut her turnovers in half (from 41 → 20.5), the **updated team turnover total** would be approximately **249.5**, instead of the original **270**.

Claude: **Current team turnover total:** Adding up all individual player turnovers from the table = **153 total team turnovers**

If Caroline Tinkhaus cut her turnovers in half:

- Current turnovers: 13
- Reduced by half: $13 \div 2 = 6.5$, rounded to **6 or 7 turnovers**
- Reduction: $13 - 6.5 = 6.5$ **fewer turnovers**

Updated team turnover total: $153 - 6.5 = 146.5$ **turnovers** (or approximately **147 turnovers** for the season)

This reduction of about 6-7 turnovers could have been significant in close games, potentially leading to additional scoring opportunities and better ball possession.

Gemini: The player with the most turnovers is **Coco Vandiver**, with a total of **34** turnovers.

If she were to cut her turnovers in half (from 34 to 17), the updated team turnover total for the season would be **253**.

9. Which game had the highest combined total of goals scored by both teams?

Prompt: Using the Schedule or Scores data, which Syracuse game had the highest sum of Syracuse and opponent goals combined?

ChatGPT: The **Syracuse vs UALBANY** game on **February 7, 2025** had the **highest combined goal total: 30 goals**.

Claude: The game with the highest sum of Syracuse and opponent goals combined was the season opener against UAlbany on February 7th, with 30 total goals (Syracuse won 21-9).

Gemini: **UAlbany** on February 7. The final score was 21-9, for a total of **30** goals.

10. During which month did Syracuse record their best average margin of victory?

Prompt: For each month of the season, calculate the average goal margin (Syracuse goals minus opponent goals) in all games. Which month had the best average margin?

ChatGPT: The month with the **best average goal margin** was **February**, with an average margin of **+2.80 goals per game**.

Claude: February had the best average goal margin at +2.8 per game.

Gemini: February's average goal margin of +2.8 was the highest of any month during the season, indicating it was the team's most dominant month in terms of scoring difference.

11. How did Syracuse's average goals allowed per game compare in wins versus losses?

Prompt: Calculate the average number of goals Syracuse conceded per game in games they won versus games they lost. What is the difference?

ChatGPT: The difference is approximately **3.02 more goals conceded** in losses compared to wins.

Defense clearly played a key role in their success.

Claude: Total goals conceded in losses: 119 **Average in losses: $119 \div 9 = 13.2$ goals per game**

Difference: $13.2 - 10.2 = 3.0$ goals per game

Syracuse conceded an average of **3.0 more goals per game in losses than in wins**, highlighting the importance of defense in their success.

Gemini: Based on the game schedule, Syracuse conceded an average of **10.2** goals per game in the games they won and **13.22** goals per game in the games they lost. The difference is **3.02** goals per game.

In their 10 victories , Syracuse conceded a total of 102 goals, averaging 10.2 goals per game. In their 9 losses , they conceded a total of 119 goals, averaging approximately 13.22 goals per game. The difference between the average goals conceded in losses versus wins is 3.02.

12. What is the correlation between draw controls and game outcomes for Syracuse this season?

Prompt: For each game, compare total draw controls to win/loss outcome. Is there a positive correlation between winning the draw control battle and winning the game for Syracuse?

ChatGPT: There is a **perfect positive correlation** between winning the **draw control battle** and winning the **game** for Syracuse.

Claude: The fact that Syracuse won the season-long draw control battle but had a losing record actually suggests there may **not** be a strong positive correlation between draw control success and winning games, at least for this Syracuse team. But without game-by-game data, I cannot definitively establish the correlation strength.

Gemini: I am unable to perform a game-by-game comparison of draw controls to win/loss outcomes. The provided document only offers total season statistics for draw controls for both Syracuse (240) and their opponents (280). It does not provide individual game data for draw controls. Therefore, it is impossible to determine if there is a correlation between winning the draw control battle in a specific game and winning that game.

Analysis of LLM Answers

1. Which player showed the largest improvement in goals or assists during the second half of the season compared to the first half?

ChatGPT: Gave a confident, detailed answer ("Emma Ward (#44), 6 goals improvement, 12 to 18").

Claude/Gemini: Both said such an answer cannot be determined from the available data and explained the limitation.

Analysis:

ChatGPT hallucinated (invented) split-half stats; the provided dataset only includes full-season cumulative stats, not per-game or per-half.

Claude and Gemini correctly recognized the data limitation and gave cautious, accurate responses.

Lesson: Not all LLMs handle missing-data cases with equal caution! ChatGPT may generate plausible-sounding but unfounded answers with insufficient data, while others may default to a safer "not possible" stance.

2. Against which opponent did Syracuse record their best offensive performance (most goals in a single game)?

All three LLMs correctly identified UALBANY (21 goals).

Analysis:

This question can be definitively answered by cross-referencing the season schedule.

All AIs successfully parsed and calculated the correct response.

Lesson: For questions directly answerable from provided, well-structured data, all LLMs perform well and reliably.

3. Which player had the highest ground ball to turnover ratio?

ChatGPT: Coco Vandiver (11.33)

Claude: Caroline Trinkhaus (9.00)

Gemini: Gave two different answers: initially Kaci Benoit (2.83), then Emma Ward (20.5) on correction.

Analysis:

No consistent answer; all LLMs provide different players and ratios. Upon manual check (using player table):

Actual: Coco Vandiver: $34 \text{ GB} / 3 \text{ TO} = 11.33$ (if using 3 TO, but table says 3 TO seems too low?). For Emma Ward: $6 \text{ GB} / 41 \text{ TO} \neq 20.5$.

Possible that models misinterpreted columns or matched wrong rows.

Lesson: When calculations require matching columns, LLMs may mix up fields/players or miscount, leading to inconsistent or hallucinated answers. Rely on Python script or manual validation for calculated stats.

4. Which player contributed the largest percentage of team points in wins?

ChatGPT: Estimated Emma Ward's contribution by assuming proportional points in all wins, noted limitation.

Claude and Gemini: Clearly stated that the dataset doesn't support this calculation, explaining the absence of win/loss splits.

Analysis:

ChatGPT offered a guess/disclaimer, Claude and Gemini were more conservative.

Lesson: Models differ in risk and conservatism—some prefer to offer informed estimates (with caveats), while others stick strictly to available data.

5. Who took the highest number of shots without scoring a goal?

ChatGPT: Kaci Benoit (2 shots, 0 goals)

Claude: Kaci Benoit (34 shots, 0 goals)

Gemini: Initially Izzy Lahah (6 shots), then Emma Ward (41 GB, 2 TO) (possible confusion).

Analysis:

Again, answers vary widely; some LLMs may misread the data or combine column values incorrectly.

Claude's answer (34 shots, 0 goals for Kaci Benoit) is closest by cross-referencing the Player_Statistics, as Kaci Benoit does have 2 shots and 0 goals—the '34' may be a typo or misreading.

Lesson: Even for "easy" questions, data misreading is common—double-check LLM answers when calculations are needed.

6. Best "two-way" impact (sum of GB, DC, CT per game)

ChatGPT: Meghan Rode (4.47)

Claude: Natalie Carter (3.83), Alexa Vogelmann (3.29), Kaci Benoit (3.21)

Gemini: Coco Vandiver (4.05)

Analysis:

Several LLMs cited names not present in the dataset (Natalie Carter). ChatGPT's number is close for Meghan Rode (who had 75 DC over 17 games).

Consistent issue: models may invent or misattribute player stats.

Lesson: LLMs may hallucinate when required to do multi-field calculations or when the calculation logic is ambiguous. Always cross-validate and ensure the model sticks to the provided data.

7. If Syracuse improved their shot percentage by 5%, how many additional goals would they have scored?

All three LLMs converged on 27 additional goals, showing correct mathematical application.

Analysis:

Easy numeric estimate, simply requiring multiplication; all models succeed.

8. Suppose the player with most turnovers reduced their turnovers by half—what's the new team total?

ChatGPT: Correctly identified Emma Ward, recalculated team turnovers.

Claude and Gemini: Miscounted (Claude used Tinkhaus with only 13 TO, Gemini cited Coco Vandiver), giving lower new totals.

Analysis:

LLMs may have difficulty correctly determining the player with the most turnovers, depending on data parsing accuracy.

Lesson: LLMs often trip on ranking/sorting data by a column, especially with dense tables or multiple IDs.

9. Game with highest combined total of goals

All three LLMs: UAlbany, 21-9 = 30 goals.

Analysis:

Directly visible in the schedule, all LLMs interpreted the data correctly.

10. Month with best average margin of victory

All three LLMs: February (+2.8)

Analysis:

All converged, suggesting correct month identification and calculation from the schedule.

11. Goals allowed per game: wins vs losses

All three LLMs: ~3 more goals allowed per game in losses than in wins; all provided similar numbers and correct logic.

Analysis:

Numeric summary questions (when game-by-game data is accessible) are handled well by all models.

12. Correlation between draw controls and game outcomes

ChatGPT: Claims perfect correlation (potentially overconfident).

Claude and Gemini: Explicit about data limitations (draw controls only provided as season total, not by game).

Analysis:

Difference in conservatism vs. hallucination/over-extrapolation.

What We Can Analyze From These Answers

Fact-based or arithmetic questions:

All models are accurate when answers are explicit in the data (total goals, top scoring game, aggregate averages).

Calculated stats and data joins:

Models frequently diverge or hallucinate on questions needing table calculations (ratios, per-game rates, split-season analysis), especially if the dataset isn't formatted for easy extraction.

Handling missing data/limitations:

Claude and Gemini more reliably state "not possible from this data," while ChatGPT sometimes attempts an answer even when data is insufficient—sometimes hallucinating plausible numbers or breakdowns.

Prompt interpretation and generation risks:

LLMs can misread columns, misattribute stats to players, or miss players not in the data. Data extraction for fields like turnovers, points in wins, or per-game trends is particularly error-prone.

Impact for research and workflow:

Always cross-validate LLM answers with manual or Python calculations for trust.

Document when the LLM "makes up" data, as this demonstrates the importance of both prompt clarity and LLM transparency.

Encourage precise, explicit prompts that set expectations about data limitations.