Name: _____ Date: _____

Coco Gauff and the Arithmetic of a Match

Reading level 13 · 1846 words

Open the official record of the 2023 US Open final and you find three pairs of numbers: 2-6, 6-3, 6-2. Add up the games, and Coco Gauff won 14 while Aryna Sabalenka won 11, by our arithmetic, yet nobody would say that a match is decided by total games. Tennis counts in nested layers, in which points make games, games make sets and sets make a match, and every layer carries its own rule about who is ahead, which is why the ledger needs reading with care. This book follows one career, from 2019 to 2025, through those layers and through the ledgers that surround them: the ranking, the error count and the serve.

The International Tennis Federation's Rules of Tennis fix the layers precisely. A singles court is 78 feet long and 27 feet wide, and the net is 3 feet high at the center. A game is scored love, 15, 30 and 40, and when both players reach three points the score is deuce. After deuce, a player must win two consecutive points to take the game. A set goes to the first player to win six games with a margin of two games, so a set that reaches 5-5 must go on until one player is two games clear. A ball that touches a line counts as touching the court bounded by that line, so a ball on the line is in.

At six games all, a tie-break game is played. It is counted 0, 1, 2, 3, and it is won by the first player to reach seven points with a margin of two, with players changing ends after every six points. At the four Grand Slams, a deciding set that reaches six games all has been settled by a ten-point tie-break since 2022. A game and a tie-break therefore demand a margin of two points. By this book's reading, those margins make it harder for a single point to settle a game, though a set can still end 7-6 and a match can still end two sets to one.

For the public, the counting began in July 2019. Gauff had made her professional debut in May 2018, made her professional debut as a qualifier in an ITF event in Florida, and the WTA lists her as the junior world number one in July 2018. At fifteen she received a wild card from the All England Club. A wild card is an invitation that bypasses the ranking, and hers was into Wimbledon qualifying, played at a nearby site. She came through it without dropping a set, and her final win was 6-1, 6-1 over Greet Minnen. The WTA described her as the youngest player ever to qualify for Wimbledon in the Open Era. That is a 2019 statement about a list, and a younger qualifier would change it.

The first round, against Venus Williams, produced figures that are small and exact. Gauff broke serve at 3-2 and won the first set in 35 minutes, and the match ended 6-4, 6-4 after 1 hour and 19 minutes. She held three match points that did not work before the fourth did. By our arithmetic, that is one conversion in four. A single match is far too small a sample to call that a habit, because a rate needs many matches before it means anything. Wins over

Magdalena Rybarikova and Polona Hercog followed, the second in a decider after Gauff saved two match points. Then a 6-3, 6-3 loss to Simona Halep on 8 July ended her Wimbledon in the round of 16.

Beside the scoreboard runs a second ledger, the ranking. The WTA describes its rankings as a rolling, 52-week, cumulative system. A player's ranking is determined by results at a maximum of 18 singles tournaments, with the WTA Finals counted as a separate nineteenth. A Grand Slam singles title is worth 2,000 points, and those rankings decide entry and seeding in tournaments. Because points expire after 52 weeks, a ranking measures the most recent year rather than a career, which is why a player must keep earning them to keep her place. Gauff first entered the top 50 on 24 February 2020, at No. 49, and she reached the top 10 on 12 September 2022. Her career high is No. 2, reached in June 2024, through November 2026.

Her first WTA title, at Linz in October 2019, shows how the ranking and the draw interact. She began that week outside the top 100 and, as she put it, got in as a lucky loser. She beat Jelena Ostapenko 6-3, 1-6, 6-2. The USTA called her the youngest WTA champion since Nicole Vaidisova in 2004, which is again a statement dated to 2019. The WTA's player page lists Linz as the first of her 12 singles titles through November 2026. Her seeding at later Grand Slam finals moved from 18 to 6 to 2, so the ranking was being rewritten beneath her with every tournament that she entered, since it is a running total rather than a fixed rank.

The Grand Slam finals form a small table in the WTA's own records. In 2022 at Roland Garros, Iga Swiatek, seeded first, beat Gauff, seeded 18th and ranked 23rd, by 6-1, 6-3. In 2023 at the US Open, Gauff, seeded sixth, beat the second seed, Sabalenka, 2-6, 6-3, 6-2. In 2025 at Roland Garros, Gauff, seeded second, beat the top seed, Sabalenka, 6-7(5), 6-2, 6-4. A seed is a forecast manufactured from the ranking. In two of these three finals the result ran against the forecast. Three matches cannot establish a trend, but they demonstrate that a forecast, however carefully calculated, can fail on the day, and that the final is where it is tested.

Inside the 2023 final, the WTA's live account kept an error ledger. In the first set Gauff made three winners and 10 unforced errors, seven of them on the forehand, while Sabalenka made 14 unforced errors. In the second set Gauff made only three unforced errors off the ground, against nine off the ground in the first, a change in behavior that the totals alone would conceal. The same live account showed how a count grows: with Gauff ahead 3-0 in the third set it had Sabalenka at 38 unforced errors, 24 of them on the forehand, and at 4-0 it had her at 40. The match then ran on to 6-2, and Tennis Majors gave the final count as 46 unforced errors and 26 winners for Sabalenka, and 13 winners and 19 unforced errors for Gauff. Using the Tennis Majors figures, winners minus errors was minus 6 for Gauff and minus 20 for Sabalenka, by our arithmetic.

What changed in that match, according to Tennis Majors, was that Gauff began shortening her backswing and playing slightly less defensively. The WTA wrote that the cumulative defensive pressure from Gauff was paying off. About an hour into the match she led the second set 3-1. She won it 6-3 and took the third 6-2 after a break at the start of the set. The whole match lasted 2 hours and 6 minutes. By this book's reading, a shorter backswing means a shorter path for the racket before it meets the ball. Whether that explains the drop in her errors is not known, so the change is reported while its cause remains only a hypothesis worth testing.

The 2025 final shows the same ledger in a harsher light. The WTA reported that Gauff had seven fewer winners than Sabalenka but 40 fewer unforced errors, and another report counted 100 unforced errors in the match, 70 of them Sabalenka's. The two reports fit together, because by our arithmetic Gauff made 30. Netting winners against errors, she finished 33 better off, since 40 fewer errors outweighs 7 fewer winners. The measure is rough, because it ignores forced errors and the serve, and a count of mistakes cannot show where a rally was won. Gauff described her second set herself: "I was trying to be more aggressive in the second set, which, it worked."

Notation can conceal a match. The 2025 score is written 6-7(5), 6-2, 6-4, where the bracket gives the loser's tie-break points, so the first set ended 7-5 to Sabalenka after 77 minutes. A report that printed 7-6, 2-6, 4-6 was describing the same match from Sabalenka's side. Sabalenka had led that first set 4-1 before Gauff reached 4-4. In the last set Sabalenka saved one championship point, and Gauff won on her second. The final lasted 2 hours and 38 minutes, and the two players together broke serve 15 times, according to one report. In that match the serve was seldom a safe point, and the break count is another ledger that the scoreboard hides.

The serve is the one stroke that begins without an opponent's ball to react to, and it is also the part of her game where the figures are least settled. At the 2022 US Open she hit a 128 mph serve against Elena-Gabriela Ruse, yet speed is not the goal. The serve must land in the correct box, and two consecutive faults lose the point. In August 2025 AP reported that she seemed to rotate her body differently and toss the ball to a different spot. She said: "It's a new motion. At times I do it well, and at times not so well." She also described serving slower as a personal choice.

Double faults were a long-running count for her. AP counted 10 in her first-round win on 26 August 2025 and more than 300 for the season by then, and one report, citing the WTA's charts, gave 430 for 2024 and 431 for 2025. In late August 2025, just before the US Open, she added a coach who is a sports biomechanics specialist, and SI reported that his work would stress balance, spinal stability and proprioception, which is the body's sense of its own position. She had won in Paris in June, before he joined. In November 2024 she won the WTA Finals in Riyadh, 3-6, 6-4, 7-6 (2), after three hours, and the bracketed 2 shows that the

tie-break ended 7-2. A serve that gave away many points and titles in the same years is one more thing a single count cannot explain.

What remains open is how much of a career is measurable at all. Reports that call her the youngest, or the first American since someone, describe a list on a single day and can be passed. A count made during a match keeps changing until the last point, and the double-fault totals are one report's reading of the WTA's charts. Through November 2026, the WTA's player page shows 12 singles titles and two Grand Slam singles titles, the 2023 US Open and the 2025 Roland Garros. The next tournament can change the title count, and only a Grand Slam can change the other. What does not change is the scoreboard from 2023, 2-6, 6-3, 6-2, which holds a lost set, a comeback and a trophy in three pairs of numbers.

Questions

1. After deuce, what must a player do to win the game?

A. Win the next two points in a row
B. Win the next point only
C. Win three points in a row

2. Why does a WTA ranking measure the past year rather than a whole career?

A. Only Grand Slams count
B. Players choose their own points
C. Points expire after 52 weeks

3. The WTA's running count had Sabalenka at 40 unforced errors, but the final count was 46. Why?

A. The WTA counted wrongly
B. The match was not over when the count was made
C. Forehand errors count twice

4. In the book, what does cumulative mean in 'cumulative, 52-week system'?

A. Played on clay
B. Kept secret
C. Adding up over time

5. Why is a shorter backswing called a hypothesis, not a proven cause?

A. Nobody saw her swing
B. Reports describe the change but not what caused her errors to drop
C. Tennis rules ban it

Words to know

cumulative: adding up
seeding: ranked placement
margin: lead needed
hypothesis: untested explanation
proprioception: body-position sense

Answer key: Coco Gauff and the Arithmetic of a Match

1. A. Win the next two points in a row
2. C. Points expire after 52 weeks
3. B. The match was not over when the count was made
4. C. Adding up over time
5. B. Reports describe the change but not what caused her errors to drop