Putting Together Resources to Support Current and Future Elementary School Teachers (23w5150), July 23 - 28, 2023

THIS IS NOT REALLY MATH

"Playing games is important as it fosters creativity, enhances problem-solving skills, and promotes social interactions."

"If you plan to retire one day but are not sure what will you do with the extra time, this is the advice that you find:

"Think of what you enjoyed doing when you were a child."





tricky math questions!!!

Set game https://www.setgame.com/set/puzzle



<u>Sudoku</u>

Sudoku.com Classic Killer									Daily Challer	nge Award	s Rules	
Difficulty: Easy Medium Hard Expert Evil									Mistakes: 0/3		00:23	
6					7		2		5	0	OFF 3	
							1	5	Undo	Erase Note	s Hint	
2	4	9		1				3	1	2	3	
4		5	8		1	3	9		· ·	2	0	
3	8			4	9				4	5	6	
	1	6		7								
8		4	1	5	3	6		2	7	8	9	
				6	4	8	3					
1	6				2			9	New Game			

KenKen or Calcudoku



Brainbashers (Skyscraper, Kakurasu)



Wordle

Digits https://www.nytimes.com/games/digits

Digits July 18, 2023



We all play games.



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My winning percentage is 64%

"How many more games do I have to play to move to 65%?"

When pressed, I said: "It depends...."

On what?

And then the door to MATH HELL opens.....

- 1. How many games have been played?
- 2. Is he going to win all the games in the future? Or alternatively
- 3. Is your play getting weaker or stronger?
- 4. Does it all depend on the number 64%?

For simplicity lets assume we played 693 games and won 443 of those then

 $\frac{443}{693} = 0.6392$ that makes about 64%.

Let us also assume that you will win every game from now on.

How many more games? "x"

I have won 443 games out of 693. How many more games do I have to win to increase my percentage of winning by 1 percent?

ChatGPT

To determine the number of additional games you need to win in order to increase your winning percentage by 1 percent, we can follow these steps:

- Calculate your current winning percentage by dividing the number of games won by the total number of games played and multiplying by 100: Current Winning Percentage = (443 / 693) * 100 = 63.9%
- Calculate the desired winning percentage by adding 1 to your current winning percentage: Desired Winning Percentage = Current Winning Percentage + 1 = 63.9 + 1 = 64.9%
- 3. Set up the equation to find the number of additional wins needed: (443 + X) / (693 + X) = 64.9 / 100

Here, X represents the number of additional wins needed.

4. Solve the equation for X: Cross-multiply: (443 + X) * 100 = 64.9 * (693 + X) Distribute: 44300 + 100X = 44833.7 + 64.9X Combine like terms: 35.1X = 533.7 Solve for X: X = 533.7 / 35.1 ≈ 15.21

Therefore, you would need to win approximately 15 more games to increase your winning percentage by 1 percent.

What if I also loose some of the games? How many more do I need to play to get 64.9% average?

ChatGPT

If you want to determine how many more games you need to play, considering both wins and losses, in order to achieve a 64.9% average winning percentage, we can follow these steps:

- Calculate the total number of games you have played so far: Total Games Played = Games Won + Games Lost = 443 + (693 - 443) = 693
- 2. Calculate your current winning percentage: Current Winning Percentage = (Games Won / Total Games Played) * 100 = (443 / 693) * 100 ≈ 63.9%
- 3. Calculate the desired number of games won to achieve a 64.9% average winning percentage: Desired Games Won = (Desired Winning Percentage / 100) * Total Games Played = (64.9 / 100) * 693 ≈ 449.46
- 4. Calculate the number of additional games you need to win: Additional Games Won = Desired Games Won Games Won = 449.46 443 ≈ 6.46

5. Calculate the number of additional games you need to play (considering both wins and losses): Additional Games Played = Additional Games Won + Additional Games Lost Since each game played results in either a win or a loss, we can subtract the number of additional games won from the total number of additional games needed to find the number of additional games lost: Additional Games Lost = Additional Games Played - Additional Games Won Therefore, Additional Games Played = Additional Games Won + (Additional Games Played - Additional Games Won) Substituting the values we have, we get: Additional Games Played = 6.46 + (Additional Games Played - 6.46) Solving for Additional Games Played: Additional Games Played -(Additional Games Played - 6.46) = 6.46 Additional Games Played -Additional Games Played + 6.46 = 6.46 6.46 = 6.46 This equation is satisfied for any positive value of Additional Games Played. It means that you can play any number of additional games as long as the number of additional games won is approximately 6.46. The number of additional games played will depend on the outcomes (wins/losses) of those games.

Therefore, to achieve a 64.9% average winning percentage, you need to win approximately 6.46 more games. The number of additional games played will depend on the results (wins/losses) of those games.

"Elementary school teachers need more science education to effectively inspire curiosity and confidently cultivate young minds in the fundamental principles of the natural world."

"Math is the most important science as it serves as the universal language underlying all scientific disciplines, enabling us to understand and explore the fundamental principles governing our universe."