

What a loss! Chuck E. Cheese is going out of business.



In June, Chuck E. Cheese filed for bankruptcy. It has been a tough year for all restaurants with Covid-19 dining restrictions and the new need for people to not share paper products and utensils.

The company had already ordered a 7 billion paper tickets and those tickets had already been printed and distributed before the virus hit.



So, rather than pay for the newly printed tickets, Chuck E. Cheese has negotiated with the printer and distributors to destroy the tickets. But that will cost money too and the pizza chain is bankrupt.

The parent company, CEC Entertainment, had to ask a judge for approval to spend 2.3 million dollars to have those tickets destroyed and settle with their suppliers.

Never fear, your saved tickets are still good at the few Chuck E. Cheese restaurants that are still open.

By the way, the amount of paper that will need to be shredded would fill 65 shipping containers that are each 40 feet long.

1. What does all of this make you wonder?

So, Chuck E. Cheese wants to destroy the 7 billion prize tickets that would have had a value of 9 million dollars if they reached the hands of the public.

2. If CEC Entertainment is correct about the value of those tickets then how much is each ticket worth?



We've read that you used to be able to buy 3 tokens for one dollar. Tokens were used to play all of the games in the restaurant. They usually have alley bowling, foosball, dancing games, racing and shooting games, video and touch screen games, and prize games like crane claw machines.

So, you buy tokens to play games. Each game requires one token. From playing the games you can win tickets. On average each game rewards with 4 tickets. The tickets are then used to "purchase" kind of odd and unusual prize toys.

3. With this new information, again find out the approximate cost of one ticket.

4. Chuck E. Cheese claims that those 7 billion tickets are worth 90 million dollars. With this new information, is this approximation still reasonable?



But wait! When you buy a token, you get the pleasure of playing a game. So, the value of a token is that you get to play a game and you get to win some tickets. So maybe our calculation of comparing 3 tokens for \$1.00 and one game for 4 tickets is missing the value of just playing the game.

Assume, for the moment, that the value of just playing a game is \$0.25. Then each token is worth \$0.25 plus 4 tickets. That makes the value of those 4 tickets really about $\$0.33 - \$0.25 = \$0.08$.

5. Now calculate how much the value of those 7 million tickets might be worth. Are we getting closer to 9 million dollars?

Sources: <https://edition.cnn.com/2020/09/16/business/chuck-e-cheese-prize-tickets/index.html>
<https://www.reddit.com/r/theydidthemath/>