

Kristen's cookies

Business



The cycle time is 10 minutes as show above by the bottleneck of Load/Bake. If orders are made in 1-dozen sizes then 24 orders can be filled in a night.

This doesn't actually depend on the size of the order. If 2-dozen cookies are made in one batch then it takes 6 minutes to mix, 2 minutes to spoon the first dozen, 10 minutes to bake the first dozen, and while the first cookies are baking, the second are spooned and queued so that when the first dozen is cooling for five minutes, the second dozen is asking.

The reason why this has the same telling is because of the 100% utilization of the oven as the bottleneck.

Cookies are being baked consistently for all 4 hours of the night so it can't take any shorter time. 4. Per 1-dozen cookies I work 8 minutes while my roommate works 4. For orders with 2-dozen cookies, I don't have to mix again so my total labor is 10 minutes while my roommate works 5 since she only packs and collects payment once. For three dozen cookies I mix all of the dough for 6 minutes and spoon three times for 2 minutes each for a total of 12 minutes.

My roommate loads the three orders in for a total of 3 minutes as well as she packs and collects for a grand total of 6 minutes. 5. I would offer a discount for orders larger than one dozen since it is more efficient of my roommate's and my labor. The cookies take the same amount of time to bake, but we have to do less per dozen if there is more than one. 6. We only need one mixer if I can clean the mixer in my two free minutes after spooning and before batch two needs to be mixed.

We need at least two trays for asking though so that when one order comes out of the oven to cool the next can go right in.

Then five minutes into the second batch baking the first dozen have cooled and the tray can be emptied for the third dozen. 7. The oven/baking activity is the bottleneck because it is at full capacity. It is never not being used.

The activities before and after are waiting solely on the cookies coming out of the oven. Another oven would be a game changer since two dozen cookies could be baked at the same time. More cookie trays would be needed as well as more mixers and maybe even a hired roommate if possible so that the oven is still used to its full potential as well as the mixing.

Another oven would be worth the time saved. Originally for three dozen cookies (mixed separately) it took 46 minutes to make. With two ovens it cuts 2 minutes off of each order (if I am still in charge of milling and spooning) and changes those to be a new bottleneck.

Overall that's 48 minutes of time cut which allows us to make even one more Dacca AT cookies. It's extra pronto over time NAS to owe greater than or equal to the expense of the rent of the new oven.