

Mathematics in hotel kitchen

- Reading Scales for ingredients for making things fresh.
- Stock Take
- Ordering food quantities and costings
- Starters and desserts how many are needed if guests can have unlimited amounts and help themselves
- Main course options, how much food to prepare in advance to minimize waste based on amount of guests in hotel
- Percentage of wastage
- Buying in bulk (if you buy in bulk to make things cheaper you then have to consider storage of items.
- Which dishes need more products that can be in higher demand and also cost more e.g. eggs, scrambled vs fried?
- Buying power to do deals with trusted suppliers
- Impact of rising costs of food prices

Mathematics in Staffing Management

- Zero hours contracts, what are the benefits and drawbacks?
- Staff who have contracted hours making sure they utilise those hours
- Cost of staff with rising wages
- Supply and demand of staff impact of both Brexit and Covid

Mathematics in hotel capacity and pricing of rooms

- 'Beds and heads' how many beds do you have and how many people do you need booked in to make it cost effective?
- Pricing – How do you price your rooms to remain competitive in a crowded market but still make a profit?
- Are all inclusive weeks cost effective for the hotel? When do you introduce those weeks?
- Upgrades available to customer e.g sea view room
- Secondary spends (lunches, coffee shop)
- Is it cheaper in the current cost of living crisis for some people to stay in a hotel (all inclusive) than at home?

Other costs

- Entertainment, cost of providing nightly acts
- Coach trips for customers

Mathematics in the House keeping department

- Housekeeping stock – buy in bulk
- Staffing costs
- Costs of laundry cleaning
- Recycling