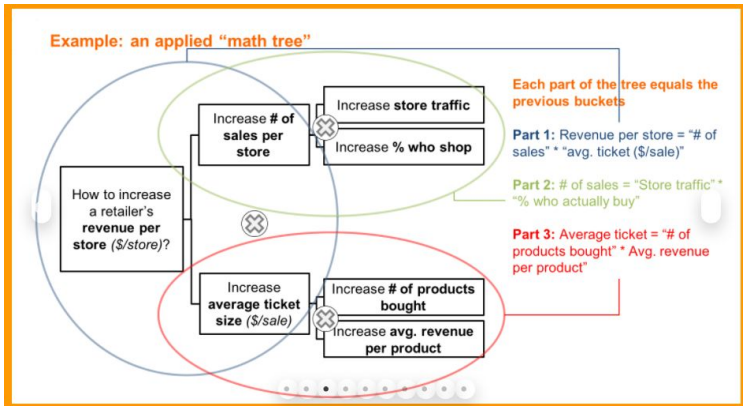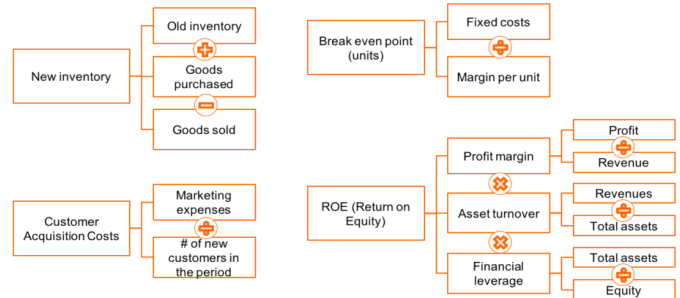# Issue Tree

1. Think about all the reasons for the issue. Reasons can be a mistake as well. Think from both perspectives.
2. Make sure reasons are Mutually Exclusive, Collectively Exhaustive.
3. Break down until solution

The 2 minute recap to "The 5 Ways to be MECE"

Technique	What it is this technique like	A famous framework from each technique	Structuring the "how to increase store sales" problem using each technique
Algebra Structures	A math equation derived from the drivers of a variable	The Profitability Equation: "Profits = Revenues – Costs"	Increase # of customers ⊗ Increase $ spent per customer
Process Structures	A break down of the problem's underlying process into its stages	The Marketing Funnel: "Awareness -> Opinion -> Consideration -> Preference -> Purchase"	Increase store traffic → Increase % who pick up product → Increase % of pickers that buy → Increase $ spent per buyer
Conceptual Frameworks	A proven qualitative categorization of a problem's parts	The 3Cs of Strategy: "Customers, Company, Competition"	Improve Product Portfolio / Improve Store Location /Visibility / Improve Prices / Improve Advertising/ Awareness
Segmentations	A "slicing up" of the problem into its visible parts	Customer segmentations: could be by Age, Region, Income Levels, etc.	Sell to non-buyers / Sell more to people who bought once / Sell more to people who bought more than once
Opposite Words	A Yin-yang-like division of the problem into its opposite, complementary parts	"Supply vs. Demand"; "Internal vs. External"; "Financial vs. Non-Financial"	Through marketing actions / Through non-marketing actions

Market Sizing

1. **Geographical** segmentation

Break down the map until you're comfortable estimating with the smaller unit.

1. **Demographic** segmentation

Common demographic factors in market-sizing and guesstimate questions are age, gender, income, family status, education.

2. **Behavioral** segmentation

This one segments the market based on the customers' actions.

If you look back at my example, you can see two behavioral segments there: smartphone users and keyboard-phone users.

3. **Replacement** and growth

If the market size doesn't change significantly, replacement is useful to estimate potential sales from existing customers, fo products with predictable lifespans, such as FMCGs, digital devices, motorbikes, and cars.

However, if the market size grows significantly (positive or negative) within the question timeframe, you need to calculate that growth separate from replacement.

In my smartphone example, if the interviewer asked me to calculate the market size in 2030 with 5% consistent growth, I would need to add a 60% total growth to 24 million, for a final 38 million units per year.

Common data:

	World	EU	US	China
Population	7 billion	450 million	330 million	1.4 billion
Life expectancy	72	81	79	76

196 countries in the world

50 states in USA with 330 million population

Cali - 40 mil (LA - 4mil)

Texas - 30 mil

Florida - 20 mil

Newyork - 20 mil (NYC 10mil)

Rest of known states - 5 mil to 10 mil

D.C. - 700K

Rest of top cities 1-2mil

Every age group until 60 with diff of 5 years are 20 million in total

40% earn less than 50k

50% earn 50 to 150k

10% earn more than 150k

(start at 15000 and add 10% and 10k)

1 foot = 12 inches
1 inch = 2.5 cm
1 km = 0.6 miles

My height is 6 ft - 70 inches - 2 meters- 200 cm
Plane is 120 ft - 1400 inches - 50 metres - 5000 cm

Golf ball - 1.5 inches diameter - 4 cm diametre - 50 grams weight
Soccer ball - 8 inches diameter - 20 cm diameter - 400 grams weight

1 pizza is 1 sq feet
1 bhk is roughly 500 sq. feet
GG 2BHK is 700

1 acre is 40k sq feet

Volume:

cube = a***

rectangle = lbh

sphere = (4/3) pi r***

cylinder = pi r** h

pyramid = (1/3) bh

cone = 1/3 pi r 2 h

Value proposition Questions to ask

1. What product or service do you offer?

2. Who is your target customer?
   - How old are they?
   - What is their gender?
   - Where do they live?
   - What do they do for work?
   - How much money do they make?
   - What's their behavioral pattern?

3. What problem does your product solve for your customer?

4. How does your product or service benefit your customer?
   - What emotions are involved (i.e. did they go from frustrated to happy)?
   - How are the different areas of their life affected (family, work, friendships)?
   - What is the customer experience like outside of the end result?

5. What differentiates you from competitors?