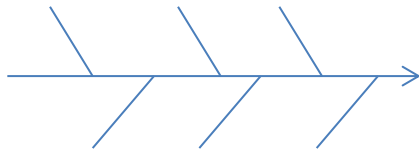


1. Describe how to construct the following tools and how they are useful.

a. Fishbone Diagram (5 pts)

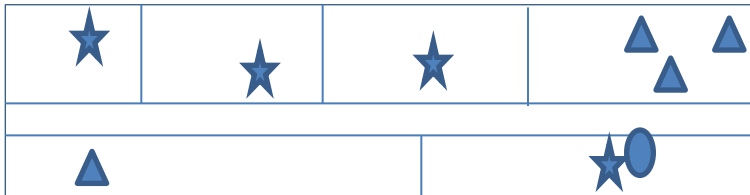
Man, Machine, Method, Materials, Measurement, Environment



b. Problem Concentration Diagram (5 pts)

Create a map or pictorial shape of the object in question, use symbols to indicate the type of defect. Place symbols in locations they are found

Good for understanding if defects are random (throughout the part) or concentrated in one area



c. Affinity Diagram (5 pts)

Brainstorming activity conducted using post-it notes

Individual post-it notes are then grouped based on similarities (categories)

Group silently (without discussion), moves post its into categories

Shows relationships between ideas, assists in focusing wide ranging ideas by showing similarities

d. Scatter Diagram (5 pts)

Numerical data depicted on graph to determine if there is a relationship

Independent variable vs dependent variable

If results random, there is no relationship, may show linear (up or down), cyclical, clusters, etc.