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 BUS 605: Operations Management
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 Assignment 1: Analytic Problem
 5/21/20

Product Design:

The product which is being designed is a pen gift set This pen set can be used for almost anything that you want. Can be used to sign a important document or even keep tack of the book at a basketball game. These are how it is broken down.

Break the Pen Set:

- The tip
- The barrel
- Ink Cartridge
- Sping
- Cap with the clip
- Key ring
- Chain
- Heart
- Gift box

Process Flow/Production Routing:

Pen Gift Set	Operation	Transport	Inspection	Delay	Storage
Receiving Material		X			X
Storing					
The tip	X				
The barrel	X				
Ink Cartridge	X				
Spring	X				
Cap with clip	X				
Key ring	X				
Chain	X				
Heart	X				

Gift box		X			
Warehouse		X			
Shipping					X
Storing		X			
FINAL		8	4		2

Part Numbering:

The tip: PN001

The barrel: PN002

Ink Cartridge: PN003

Sping: PN004

Cap with the clip: PN005

Key ring: PN006

Chain: PN007

Heart: PN008

Gift box: PN009

Parts list:

Parts lists units and cost			

Part Number	Part Name	Units	Cost
PN 001	The Tip	1	0.4
PN 002	The Barrel	1	0.24
PN 003	Ink Catiridge	1	0.03
PN 004	Spring	1	0.03
PN 005	Cap with Clip	1	0.035
PN 006	Key Ring	1	0.6
PN 007	Chain	1	0.3
PN 008	Heart	1	0.5
PN 009	Giftbox	1	Cost = 2.135

Bills of Material Tree Diagram:

				Pe n		
		The tip			Chain	
Barre l	Spring	Cap	Ink		Heart	Key Ring