Person_Beer_Preference

PersonID	Address	BeersLiked	Manufacturer	FavoriteBeer
1	119 S Street	Bud Light	Anheuser-Busch	Miller Lite
1	119 S Street	Budweiser	Anheuser-Busch	Miller Lite
2	250 R Street	Coors	MillerCoors	High Life
2	250 R Street	Budweiser	Anheuser-Busch	High Life
3	350 D Street	High Life	MillerCoors	Keyston Light
4	320 A Street	Miller	MillerCoors	Miller
5	250 R Street	Foster's	MillerCoors	High Life
6	220 B Street	Blue Ribbon	Pabst Brewing	Blue Ribbon
6	220 B Street	Lone Start	Pabst Brewing	Blue Ribbon
7	220 B Street	Old Milwaukee	Pabst Brewing	Blue Ribbon
7	220 B Street	Blast	Pabst Brewing	Blue Ribbon
8	320 A Street	Budweiser	Anheuser-Busch	Miller
9	119 S Street	Fat Tire	New Belgium	Sunshine
9	119 S Street	Sunshine	New Belgium	Sunshine

There are several functional dependencies in the table. Two of them are given below. Find and write down another functional dependency. Then, based on all the functional dependencies, write down the normalized tables using the Relation Expressions:

Functional Dependencies

(PersonID, BeersLiked) ->Address, Manufacturer, FavoriteBeer PersonID -> Address, FavoriteBeer

Normalized tables:

SaleID	SaleDate	Product	Qty	Cost	Amt	Customer	SalesPerson	SalesPersonPhone	SalesPersonEmail
1	1/1/2014	Paper	20	12.95	259	Jack	John Smith	360-650-1111	jsmith@wwu.edu
2	1/1/2014	Staplers	42	15.95	669	Josh	Kyle Clark	360-650-1112	kclark@wwu.edu
3	1/2/2014	Pens	44	2.19	96	April	Sean Clinton	360-650-1113	sclinton@wwu.edu
4	1/2/2014	Paper	10	12.95	129	Craig	John Smith	360-650-1111	jsmith@wwu.edu
5	1/3/2014	Pens	95	2.19	208	Acton	Sean Clinton	360-650-1113	sclinton@wwu.edu
6	1/3/2014	File Folders	8	4.99	39	Adolf	Rab Chen	360-650-1114	rchen@wwu.edu
7	1/3/2014	Staplers	25	15.95	398	Rabbie	Kyle Clark	360-650-1112	kclark@wwu.edu
8	1/4/2014	File Folders	97	4.99	484	Pablo	Rab Chen	360-650-1114	rchen@wwu.edu
9	1/4/2014	Paper	20	12.95	259	Paige	John Smith	360-650-1111	jsmith@wwu.edu
10	1/4/2014	Paper	20	12.95	259	Jason	Kyle Clark	360-650-1112	kclark@wwu.edu
							-		

Two functional dependencies are given. Find and write down another functional dependency (Hint: two columns are determined by another column). Then, based on all the functional dependencies, write down the normalized tables using the Relation Expressions:

Functional Dependencies:

SaleID → SaleDate, Product, Qty, Cost, Amt, Customer, SalesPerson, SalesPersonPhone, SalesPersonEmail

Product -> Cost

Normalized tables: