Normalize the information in the following form to third normal form (3NF).

Provide the statements for 0NF, 1NF, 2NF, and 3NF, along with the associated entity relationship diagrams including cardinality ratios. Use the space on the next two pages for your work. **Marks will be deducted for sloppiness.**

Note: The generalized pieces of information are represented by the bolded items, just as in Lab 3. The non-bolded items are specific data included only to give an example of what the invoice would look like.

Design Assumptions:

1)   Bills are uniquely identified by the Bill Number.
2)   The Item Cost of a menu item never changes from one Bill to another.

Restaurant Bill

Bill Number: 12133

Table Number: 45

Server ID: 1899

Date: December 15, 2012

Number Of Guests: 4

Server Name: John Smith

Menu Item #	Description	Item Cost	Quantity	Line Total
144	Beef Nachos	$ 22.00	1	$ 22.00
356	Jug of Keith's	$ 17.55	2	$ 35.10
			Subtotal:	$ 57.10
			GST:	$ 2.86
			Discount:	$ 0.00
			Total:	$ 59.96