## Part 1.

1. The table has relevant data and the fields are atomic, but each column contains duplicates and the relationships in the data are not properly expressed in the table.

2.

PackageID	TagNumber	InstallDate	SoftwareCostUSD
AC01	32808	09-13-2005	754.95
DB32	32808	12-03-2005	380.00
DB32	37691	06-15-2005	380.00
DB33	57772	05-27-2005	412.77
WP08	32808	1-12-2006	185.00
WP08	37691	06-15-2005	227.50
WP08	57222	05-27-2005	170.24
WP09	59836	10-30-2005	35.00
WP09	77740	05-27-2005	35.00

3. The primary key here would have to be PackageID, TagNumber because this combination represents one particular installation.

## Part Two

## 4.

PackageID	PackageNa me	TagNumber	ComputerMo del	InstallDate	SoftwareCost USD
AC01	software1	32808	IBM	09-13-2005	754.95
DB32	software2	32808	IBM	12-03-2005	380.00
DB32	software2	37691	Apple	06-15-2005	380.00
DB33	software3	57772	Dell	05-27-2005	412.77
WP08	software4	32808	IBM	1-12-2006	185.00
WP08	software4	37691	Apple	06-15-2005	227.50
WP08	software4	57222	IBM	05-27-2005	170.24
WP09	software5	59836	Apple	10-30-2005	35.00
WP09	software5	77740	Dell	05-27-2005	35.00

- PackageName is dependent on PackageID, Computer Model is dependent on TagNumber, and installDate and SoftwareCostUSD are dependent on PackageID and TagNumber.
- 6. This table is not in third normal form because PackageName is dependent on just PackageID and not the whole key. Similarly ComputerModel is dependent on TagNumber but not PackageID, TagNumber.

## Part Three

7. PackageID; TagNumber; PackageID, TagNumber

10.

- 8. In the Software table, PackageName relies on PackageID. In the Computers table, ComputerModel relies on TagNumber. In the Installations table InstallationDate and SoftwarePriceUSD rely on PackageID, TagNumber.
- 9. The new tables are in third normal form because all of the data in each table relies on nothing but the key.

