

1a) The differences between the 3 designs are due to the relationships between the entities (which are the same).

They are equivalent, although they have different levels of information granularity.

A only has Supplies, which covers all information about a supply as a single record.

B is the opposite, splitting a supply into 3 relationships. This means that more relationships have to be referenced in order to extract the information about a single supply.

C is similar to A. However, it also extracts the Uses relationship (like B), which provides more information about a supply.