





The many to many relationships and their bridge entities are shown with the dashed lines between them. So,

- ✓ The ORDER\_LINE table is the bridge entity for the ORDER and PRODUCT tables.
- ✓ The PROD\_PROM table is the bridge entity for the PRODUCT and PROMOTION tables.
- ✓ The PROD\_SUPPLIER table is the bridge entity for the PRODUCT and SUPPLIER tables.

Besides the primary key and foreign key constraints, I would use UNIQUE constraint on PRODUCT\_DESCRIPTION so that the each and every product would have a unique description. I would also use NOT NULL constraint to make sure that there would not be any null record for the PRODUCT\_AMT.

There would be some data validation rules on my data model. For example,

- ✓ The ORDER\_DATE cannot be later than ORDER\_REFUND\_DATE.
- ✓ CUSTOMER\_PHONE should be 10 digits in length and cannot start with a 0.
- ✓ EMPLOYEE\_SSN should be 9 digits in length.
- ✓ SALARY\_START\_DATE cannot be later than SALARY\_END\_DATE.
- ✓ EMPLOYEE\_STATE and CUSTOMER\_STATE should be capitalized 2 characters in length, etc.