2.

Dependency Diagram:

Table 1

```
                    ┌──────────────────────────────────┐
             ┌──────┤                                   │
             │      │                                   ▼
     ┌───────────┬───────────┬───────────┐
     │  Inv_Num  │  Prod_Num │ Quant_Sold│
     │           │           │           │
     └───────────┴───────────┴───────────┘
```
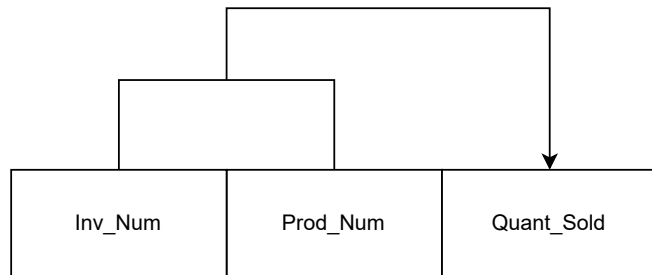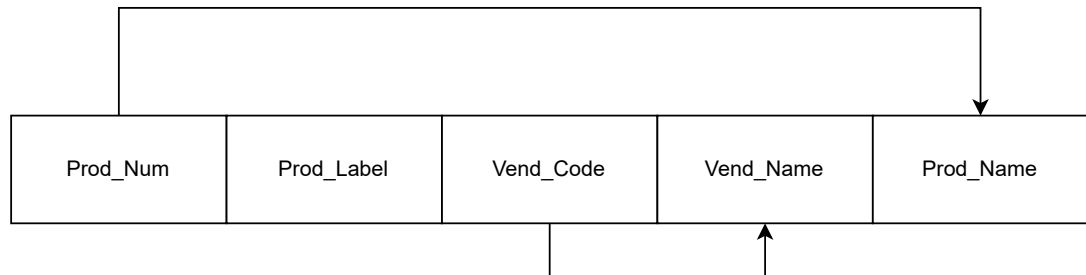
Primary key: Inv_Num + Prod_Num
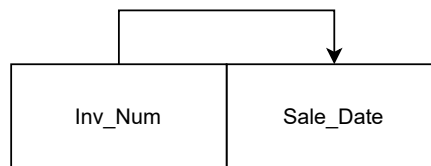Foreign keys: Inv_Num (to Table 3), Prod_Num (to Table 2)
Normal form: 3NF

Table 2

```
      ┌───────────────────────────────────────────────────┐
      │                                                   │
      │                                                   ▼
  ┌──────────┬───────────┬───────────┬───────────┬───────────┐
  │ Prod_Num │ Prod_Label│ Vend_Code │ Vend_Name │ Prod_Name │
  │          │           │           │           │           │
  └──────────┴───────────┴───────────┴───────────┴───────────┘
                              │           ▲
                              └───────────┘
                              Transitive
                              Dependency
```

Primary key: Prod_Num
Foreign keys: None
Normal form: 2NF - Contains Transitive Dependency

Table 3

```
        ┌───────────────────┐
        │                   ▼
   ┌───────────┬───────────┐
   │  Inv_Num  │ Sale_Date │
   │           │           │
   └───────────┴───────────┘
```

Primary key: Inv_Num
Foreign_keys: None
Normal Form: 3NF

Dependencies:

Transitive-

Vend_Code -> Vend_Name