

Understanding ER-Model

1. B
2. C
3. C (line means a key that uniquely identifies the entity, dotted line (on weak entity) means partial key that uniquely identifies the entity only with the corresponding other entity)
4. D (N can mean any number and there's no need to participate in the relation)
5. T
6. F
7. F
8. F
9. T
10. T
11. T (to have a **isDaughter** relationship there needs to be 1 mother and 1 father)
12. F (no need to participate in the **isSon** relationship)
13. T
14. T
15. F (no need to participate)
16. F

Cardinalities in Min/Max Notation

```

.----- .      N      1      .-----
|Employee|----- works -----|Departement|
'-----'      (0, 1)      (0, N)  '-----'

```

Departments can have many employees, employees can have work or not.

```

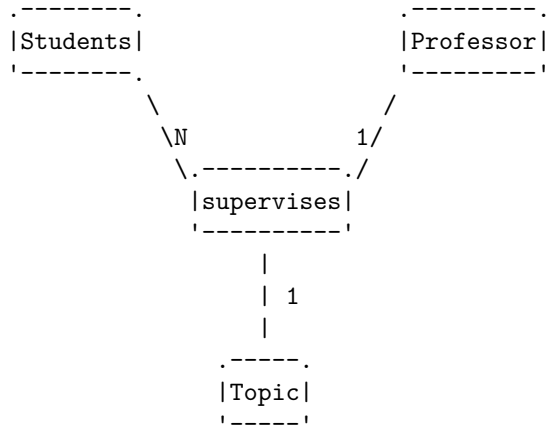
.----- .      1      1      .-----
|Employee|----- mang. -----|Departement|
'-----'      (0, 1)      (0, 1)  '-----'

```

Rest is like this.

Cardinalities in Ternary Relationships

Not possible because there are cases we can't cover.



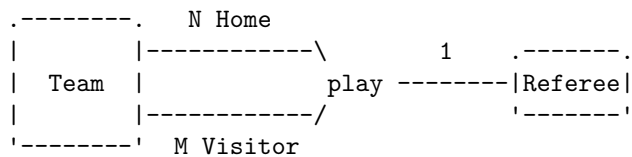
Modeling Miniworlds: Getting started

1.

```

.===. N      1 .===. N      1 .===. N      1 .===. N      1 .------.
| A |===in---| H |===in---| S |===in---| C |===in---|Country|
'=== ' N      1 '=== ' N      1 '=== ' N      1 '=== ' N      1 '-----'
  
```

2.



Miniworld: International Wholesale Supplier