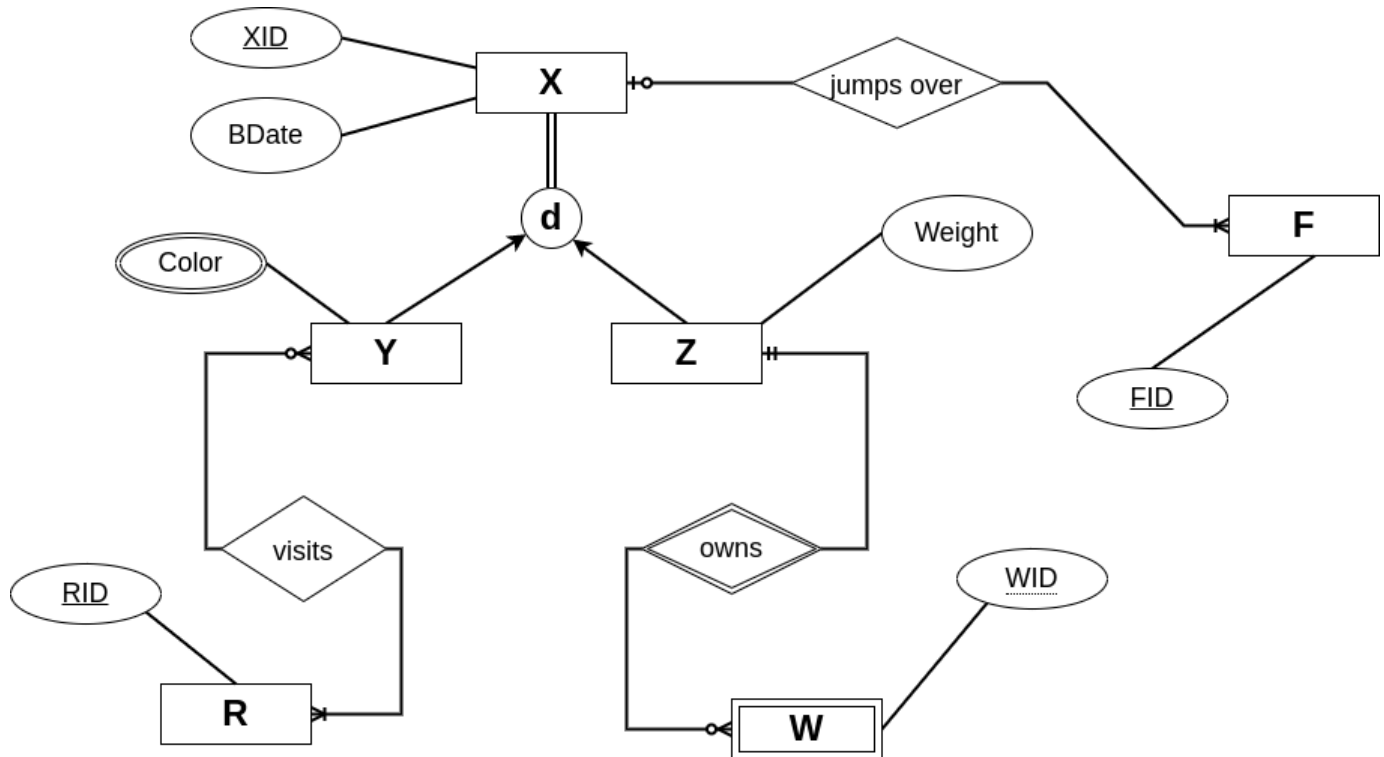


## Reading EER Models Lab Solution



Consider the EER model above and answer the following questions, explaining how you got the answer from the diagram notation.

- What are the attributes of a **Y**?

**Color, XID and BDate** because Y inherits X's attributes.

- What is the unique identifier of a **W**?

**XID and WID combined**, because W is a weak entity and takes its identity from Z, which is an X.

- True or False: Whatever *jumps over* an **F** is either a **Y** or a **Z**.

**True.** X's jump over F's. Every X must be either a Y or a Z. The double line tells us that all X's participate in the hierarchy, and the 'd' indicates a disjoint hierarchy, meaning that an entity belongs to only one of the subclasses (so either an X or a Y but not both).

- Identify the multi-valued attribute in the diagram and explain what it tells us.

**Color** is a multi-valued attribute of a Y, which means a Y may be many colors.

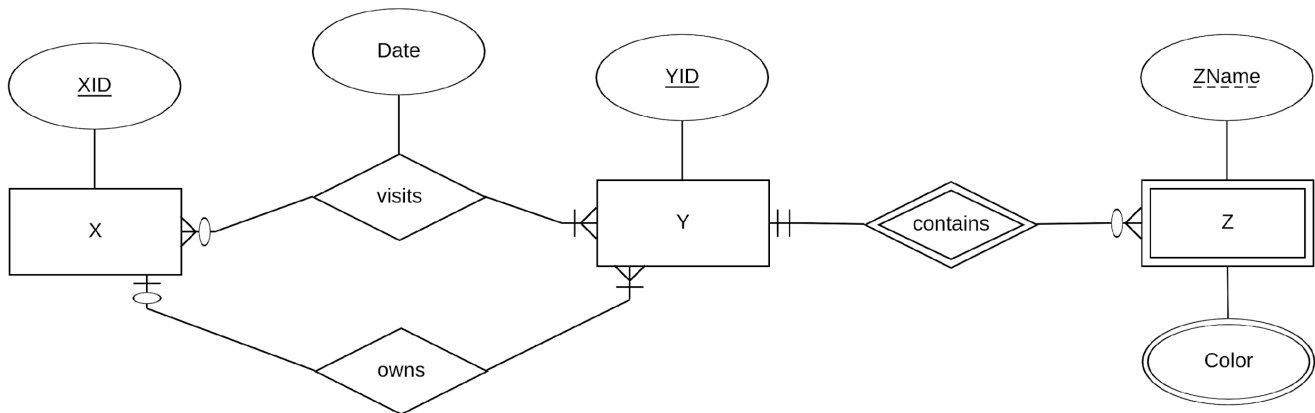
- True or False: An **R** may be *visited* by something that does not *jump over* an **F**.

**False.** R's are visited by Ys. An R may not be visited by any Y's, but if it is, a Y is a type of an X. **Every** X jumps over an F, which we know by the mandatory participation ending on the connector to F.

- What are the minimum and maximum number of **Y**'s an **R** may be *visited* by?

**An R may be visited by 0 (minimum) or more (any number maximum) Y's.** We see this from the partial participation and N cardinality ending on the connector to Y.

Write everything that you can know based on reading the ER model below. Use just plain, regular language – **do not** use any technical terminology like *weak entity*, or *mandatory relationship*. Two facts are already written as an example.



*An X is uniquely identified by its XID.  
An X owns at least one Y.*

- An X may own many Ys.**
- An X visits at least 1 but maybe more Y's.**
- A Y is uniquely identified by its YID.**
- A Y may be owned by an X, but maybe not.**
- A Y may be visited by 0 or more X's.**
- The visit of a particular X to a particular Y has a date.**

- A Y contains 0 or more Z's.**
- The Z's contained within a particular Y have a unique ZName.**
- A Z is uniquely identified by the Y which contains it and its ZName.**
- Z's can be multi-colored.**