Exercise 1 *Type Classes*

1. What is the difference between a data type and a type class?

2. (i) What is the minimal complete definition of `Eq`?
   (ii) What is the minimal complete definition of `Ord`?
   (iii) Name 4 functions required for the minimal complete definition of `Num`.

3. Answer true or false to the following statements:
   (i) Every instance of `Ord` must be an instance of `Eq`
   (ii) Every instance of `Num` must be an instance of `Eq`
   (iii) `String` is an instance of `Ord`