PA7.pdf

1. Generics are used because different types have different behaviors such as our example with an integer based implementation. By using generics we can provide the same functionality for any possible input type without having to copy massive amounts of code for each type we want to use.
2. This would lead to significant issues with polymorphism. By locking the object to a given type we prevent instances of typeMistmatch errors from occurring. The main issue that would occur is that by treating everything like an object, input types could be illegally cast to wrong types causing either compiler or runtime errors.
3. Since we don't know what type T is at runtime we cannot create an array of type T.
4. You are able to use as many type parameters as needed in a generic class, although convention dictates you would be limited to 26.
5. Type erasure is a process performed by the compiler at runtime that changes generic types to either their bound types or to the Object type if unbounded.