

Specifications: Numerics

The `Numerics` class is a utility class for working with `Number` objects (and their specializations) and numeric values. In addition to the obvious specifications illustrated in the UML class diagram, the `Numerics` class must satisfy the following specifications.

1. The default `double` value of a missing value must be `0.0`.
2. The `doubleValue(Double number)` method must return the `double` value of the `Double` parameter unless it is `null`, in which case it must return the default `double` value of a missing value.
3. The `doubleValue(Double number, double missingValue)` method must return the `double` value of the `Double` parameter unless it is `null`, in which case it must return `missingValue`.
4. The `doubleValue(Double number, double missingValue, double lowerBound)` method must return the `double` value of the `Double` parameter unless it is `null` or it is less than `lowerBound`, in which case it must return `missingValue`.
5. The `signum(int n)` method must return `-1` if `n` is less than `0`, `0` if `n` equals `0`, and `1` if `n` is greater than `0`.