

Create class Fraction that is used for representing fractional numbers. The class constructor looks like this:

```
class Fraction(numerator: Int, denominator: Int,  
private val sign: Int = 1): Comparable<Fraction>
```

and it should behave like previous exercise FractionMutable but the operations (addition, subtraction, multiplication etc) return a new Fraction object. The Fraction object should not have mutable state. Partial test cases for Fraction are included as an attachment to this exercise but you will need to write more to cover more of Fraction code. Find from Kotlin documentation a way to use operators (unary minus, binary plus etc) to make the code below legal.

An example of how Fraction can be used and output produced is:

```
fun main() {  
    val a = Fraction(1,2,-1)  
    println(a)  
    println(a.add(Fraction(1,3)))  
    println(a.mult(Fraction(5,2, -1)))  
    println(a.div(Fraction(2,1)))  
    println(-Fraction(1,6) + Fraction(1,2))  
    println(Fraction(2,3) * Fraction(3,2))  
    println(Fraction(1,2) > Fraction(2,3)) //  
    Comparable interface function compareTo()  
}
```

```
-1/2  
-1/6  
5/4  
1/4  
1/3  
1/1  
false
```