Due Monday 3/16/2020

Use Pair Programming and TDD to develop a software that meets the following requirements:

Write a class called `RationalNumber` that represents a fraction with an integer numerator and denominator.
A `RationalNumber` object should have the following specifications:

a) Methods:

```
public RationalNumber(int numerator, int denominator)
```

Constructs a new rational number to represent the ratio (numerator/denominator). ***[BR-1]***: The denominator cannot be 0, so throw an `IllegalArgumentException` if 0 is passed.

```
public RationalNumber()
```
Constructs a new rational number to represent the ratio (0/1).

```
public int getDenominator()

public int getNumerator()

public String toString()
```
Returns a String representation of this rational number, such as "3/5". ***[BR-2]***: Omit denominators of 1, returning "4" instead of "4/1".

```
public RationalNumber add(RationalNumber rnum)

public RationalNumber subtract(RationalNumber rnum)

public RationalNumber multiply(RationalNumber rnum)

public RationalNumber divide(RationalNumber rnum)
```

b) Additional Business Rules

Maintain your `RationalNumber` objects in reduced form:
a. ***[BR-3]:*** Avoid rational numbers such as 3/6 in favor of ½
b. ***[BR-4]:*** Avoid 2/–3 in favor of –2/3.