

Instructions:

1. Open your PrelimProject
2. In your PrelimProject, create a package named **FractionPackage**.
3. Solve the problem given below.
4. Create the class in your FractionPackage.

Problem:

Define a class named **Fraction** that can be used to manipulate fractions in a program. Among others, the class **Fraction** must include methods to **add**, **subtract**, **multiply**, and **divide** fractions. These methods return a Fraction. When you add, subtract, multiply, or divide fractions, the result need not be in lowest terms. Include **setter** and **getter** methods.

Also, include the following methods:

- **displayFraction** – a void method that is used to display a fraction (example: 2/5)
- **isAProperFraction** – a method that returns true if the fraction is a proper fraction; otherwise, it returns false
- **isAnImproperFraction** – a method that returns true if the fraction is a proper fraction; otherwise, it returns false
- **reciprocal** – a method that returns the reciprocal of a fraction

Create a tester program named **FractionTest** that instantiates Fraction objects and invokes the methods mentioned above.