
Rational numbers (3)**P53361_en**

Using the same definition of the rational numbers as in problem P85696, write the functions

```
Rational sum(const Rational& a, const Rational& b);  
Rational subtraction(const Rational& a, const Rational& b);  
Rational product(const Rational& a, const Rational& b);  
Rational division(const Rational& a, const Rational& b);
```

that returns respectively the sum, the subtraction, the product and the division of two rational numbers given, “normalized” according to the same convention that in the exercise **RAC11**.

Write also the procedure

```
void adds_one(Rational& r);
```

that adds an unit to the rational number @r@.

Precondition

The rational numbers @a@ and @b@ are correct and normalized. In the case of division, @b@ $\neq 0$.

Observation

You only need to submit the required classes; your main program will be ignored. Strictly obey the type definitions of the statement.

Problem information

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Generation: 2026-01-25T11:14:18.886Z

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