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## Rational numbers (3)

**P53361\_en**

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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 **RACI1**.

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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