# numberlistp

```
List of numbers protocol.
```

## **Public interface**

# product/2

Calculates the product of all list numbers. Fails if the list is empty.

```
compilation:
    static

template:
    product(List,Product)

mode - number of solutions:
    product(+list(number),?number) - zero_or_one
```

#### sum/2

Calculates the sum of all list numbers. Returns zero if the list is empty.

```
compilation:
    static

template:
    sum(List,Sum)

mode - number of solutions:
    sum(+list(number),?number) - one
```

# average/2

Calculates the average (i.e. arithmetic mean) of a list of numbers. Fails if the list is empty.

```
compilation:
    static

template:
    average(List,Average)

mode - number of solutions:
    average(+list(number),?float) - zero_or_one
```

## **Protected interface**

(none)

# **Private predicates**

(none)