

```

1 #include <math.h>
2 #include "FehlerWert.h"
3
4 FehlerWert::FehlerWert(double nominal_value, double std_dev) {
5     this->nominal_value = nominal_value;
6     this->std_dev = std_dev;
7 };
8
9 FehlerWert::FehlerWert(const FehlerWert &other) {
10     this->nominal_value = other.nominal_value;
11     this->std_dev = other.std_dev;
12 }
13
14 FehlerWert FehlerWert::operator+(const FehlerWert &other) {
15     return FehlerWert(
16         this->nominal_value + other.nominal_value,
17         sqrt(this->std_dev * this->std_dev + other.std_dev * other.std_dev)
18     );
19 };
20
21 FehlerWert FehlerWert::operator*(const FehlerWert &other) {
22     double nominal_value, std_dev;
23     nominal_value = this->nominal_value * other.nominal_value;
24     std_dev = sqrt(
25         (this->std_dev / this->nominal_value) * (this->std_dev / this->nominal_value)
26         + (other.std_dev / other.nominal_value) * (other.std_dev / other.nominal_value)
27     );
28     FehlerWert tmp(nominal_value, std_dev);
29     return tmp;
30 };
31
32 FehlerWert &FehlerWert::operator=(const FehlerWert &other) {
33     if (this != &other) {
34         this->nominal_value = other.nominal_value;
35         this->std_dev = other.std_dev;
36     }
37
38     return *this;
39 };
40
41 double FehlerWert::wert() {
42     return this->nominal_value;
43 };
44
45 double FehlerWert::absolut() {
46     return this->std_dev;
47 };
48
49 double FehlerWert::relativ() {
50     return this->std_dev / this->nominal_value;
51 };
52
53 FehlerWert::FehlerWert() {
54
55 };

```