



## TRAP 2: Careful with initial values passed to STL functions

Make sure you provide correct initial values to STL functions **std::accumulate** and **std::inner\_product**, otherwise you risk truncation.


$$1.7+0.25+1.3+0.8 = 4.05$$

```
auto const v = std::vector {1.7,0.25,1.3,0.8};  
auto x = std::accumulate(std::begin(v),std::end(v), 0 );  
auto y = std::accumulate(std::begin(v),std::end(v), 0.0 );
```

 2  
 4.05

$$1.5 \times 2.5 + 2.5 \times 3.5 = 12.5$$

```
auto const a = std::vector {1.5,2.5};  
auto const b = std::vector {2.5,3.5};  
auto x = std::inner_product(std::begin(a), std::end(a),  
                             std::begin(b), 0 );  
auto y = std::inner_product(std::begin(a), std::end(a),  
                             std::begin(b), 0.0 );
```

 11  
 12.5