

## C++11 code 2.12.4: Sub-problem (2-12.d): function `testQuadOrderQuad()` → [GitLab](#)

```
2 unsigned int calcQuadOrder(const If::quad::QuadRule &quad_rule) {
3     unsigned int maximal_order = quad_rule.Order();
4
5     // Retrieve the passed quadrature rule's reference element
6     const If::base::RefEl ref_element = quad_rule.RefEl();
7
8     if (ref_element == If::base::RefElType::kTria) {
9         assert(testQuadOrderTria(quad_rule, maximal_order));
10        while (testQuadOrderTria(quad_rule, maximal_order + 1)) {
11            maximal_order++;
12        }
13    }
14
15    if (ref_element == If::base::RefElType::kQuad) {
16        assert(testQuadOrderQuad(quad_rule, maximal_order));
17        while (testQuadOrderQuad(quad_rule, maximal_order + 1)) {
18            maximal_order++;
19        }
20    }
21    return maximal_order;
22 }
```