

```
1:
2: #define BOOST_TEST_DYN_LINK
3: #define BOOST_TEST_MODULE Main
4: #include <boost/test/unit_test.hpp>
5:
6: #include <vector>
7: #include <exception>
8: #include <stdexcept>
9:
10:
11: #include "GuitarString.hpp"
12:
13: BOOST_AUTO_TEST_CASE(GS) {
14:     std::vector <sf::Int16> v;
15:
16:     v.push_back(0);
17:     v.push_back(2000);
18:     v.push_back(4000);
19:     v.push_back(-10000);
20:
21:     BOOST_REQUIRE_NO_THROW(GuitarString gs = GuitarString(v));
22:
23:     GuitarString gs = GuitarString(v);
24:
25:     // GS is 0 2000 4000 -10000
26:     BOOST_REQUIRE(gs.sample() == 0);
27:
28:     gs.tic();
29:     // it's now 2000 4000 -10000 996
30:     BOOST_REQUIRE(gs.sample() == 2000);
31:
32:     gs.tic();
33:     // it's now 4000 -10000 996 2988
34:     BOOST_REQUIRE(gs.sample() == 4000);
35:
36:     gs.tic();
37:     // it's now -10000 996 2988 -2988
38:     BOOST_REQUIRE(gs.sample() == -10000);
39:
40:     gs.tic();
41:     // it's now 996 2988 -2988 -4483
42:     BOOST_REQUIRE(gs.sample() == 996);
43:
44:     gs.tic();
45:     // it's now 2988 -2988 -4483 1984
46:     BOOST_REQUIRE(gs.sample() == 2988);
47:
48:     gs.tic();
49:     // it's now -2988 -4483 1984 0
50:     BOOST_REQUIRE(gs.sample() == -2988);
51:
52:     // a few more times
53:     gs.tic();
54:     BOOST_REQUIRE(gs.sample() == -4483);
55:     gs.tic();
56:     BOOST_REQUIRE(gs.sample() == 1984);
57:     gs.tic();
58:     BOOST_REQUIRE(gs.sample() == 0);
59: }
```