

C++11 code 11.3.8: Sub-problem (11-3.f): function `solveSineConsLaw()` → [GitLab](#)

```
2 template <typename RHSFUNCTOR>
3 Eigen::VectorXd solveSineConsLaw(RHSFUNCTOR &&g, unsigned int N,
4                                   unsigned int M) {
5     const double h = 12.0 / N;
6     const double T = 1.0;
7     Eigen::VectorXd result(N);
8
9     Eigen::VectorXd x =
10         Eigen::VectorXd::LinSpaced(N, -6.0 + 0.5 * h, 6.0 - 0.5 * h);
11     Eigen::VectorXd u0 =
12         x.unaryExpr([](double x) { return 0.0 <= x && x < 1.0 ? 1.0 : 0.0; });
13     result = explTrpzTimestepping(std::forward<RHSFUNCTOR>(g), u0, T, M);
14
15     return result;
16 }
```