

**Final Grades for MATH6041**  
(to be handed in **21 December 2020**)

Either

1. Write a summary of what you learned in the course.

Or

2. Write a detailed report on reading one of the following papers:
  - Bressan, A.; The unique limit of the Glimm scheme, Arch. Rational Mech. Anal., 130 (1995), 205-230.
  - Bouchut, F., and Perthame, B.; Kruzkov's estimates for scalar conservation laws revisited, Tran. AMS, 350 (1998), 2847-2870.
  - Lions, P. L., Perthame, B., and Tadmor, E.; A kinetic formulation of multi-dimensional scalar conservation laws and related equations, J. AMS, 7 (1994), 169-191.
  - John, F.; Blow-up for quasilinear wave equations in three space dimensions, Comm. Pure Appl. Math., 34 (1981), 29-53.
  - Liu, T. P.; Linear and nonlinear large time behavior of solutions of hyperbolic conservation laws, Comm. Pure Appl. Math., 30 (1977), 767-796.
  - Sideris, T.; Formation of singularities in three-dimensional compressible fluids, Comm. Math. Phys., 101 (1985), 475-485.
  - Liu, T. P.; Initial-boundary value problems for gas dynamics, Arch. Rational Mech. Anal., 64 (1977), 137-168.
  - Liu, T. P., and M. Pierre; Source-solutions and asymptotic behavior in conservation laws, J. Diff. Eqns, 51 (1984), 419-441.
  - Szepessy, A.; Measure-valued solutions of Scalar conservation laws with boundary conditions, Arch. Rational Mech. Anal., 107 (1989), 181-193.
  - Lions, P. L.; Perthame, B., and Souganidis: Existence and stability of entropy solutions for the hyperbolic systems of isentropic gas dynamics in Eulerian and Lagrangian coordinates, Comm. Pure Appl. Math., 49 (1996), 599-638.