

Optimal solutions of the Monge problem

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Summary. We obtain optimality conditions for Monge solutions of the Monge—Kantorovich problem with a smooth cost function. Also we give explicit solutions to Monge problems and to Monge—Kantorovich problems for several natural classes of cost functions.

Key words: Borel measure, marginal measure, measure preserving map, Monge problem, Monge—Kantorovich problem.