

MTG 5317/4303 ASSIGNMENT

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These problems are due on January 16, 2015. Please use the class periods on January 12 and 14 to work on these problems together. Write up the solutions clearly and succinctly. You may consult our textbook and other books. Each person should turn in the assignment separately.

Problem 1. Suppose that X is a regular Lindelöf space. Show that X is normal.

Problem 2. Suppose that X is a second countable regular \mathbf{T}_1 space. Show that X is metrizable.