MF795: Assignment №2

Due on Tuesday, October 6, 2020

POSTED ON: SEPTEMBER 17, 2020, 7:27 (E)

BY ANDREW LYASOFF

Do the following exercises from the book:

Exercise (2.2), Exercise (2.5), Exercise (2.6), Exercise (2.7), Exercise (2.8),

Exercise (2.19), Exercise (2.23), Exercise (2.24), Exercise (2.29), Exercise (2.35),

Exercise (2.40), Exercise (2.42), Exercise (2.48), Exercise (2.49), Exercise (2.50),

Exercise (2.60), Exercise (2.68), Exercise (2.69), Exercise (2.71), Exercise (2.75),

Exercise (2.79), Exercise (2.80), Exercise (2.81), Exercise (2.88), Exercise (2.89),

Exercise (2.91), Exercise (3.3), Exercise (3.6), Exercise (3.7), Exercise (3.16),

Exercise (3.17), Exercise (3.18), Exercise (3.26), Exercise (3.34), Exercise (3.37),

Exercise (3.44), Exercise (4.6), Exercise (4.11), Exercise (4.21), Exercise (4.25),

Exercise (4.30), Exercise (4.31), Exercise (4.36), Exercise (4.45).

HINT TO (2.91): Argue that if F happens to be continuous, then $F(F^{-1}(y)) = y$ for every $y \in \operatorname{Span}(F)$. Explain by way of an example why this feature no longer holds if the function $F(\cdot)$ has at least one discontinuity.

PLEASE NOTE: Your assignment will not be accepted without a completed cover sheet. While typing the assignments is not required, it would be very beneficial for you if you do typeset your homework by using any of the widely available programs for technical typesetting: Google Docs, MS Word, TEX or LATEX (the industry standard).