

MATH 173 PROBLEM SET 6

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May 11, 2022

Problem 1. TODO

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Solution.

(a) This problem is straightforward.

$$\begin{aligned}\overline{\mathcal{F}(\phi)(y)} &= \overline{\int_{\mathbb{R}^n} e^{-ix \cdot y} \phi(x) dx} \\ &= \int_{\mathbb{R}^n} \overline{e^{-ix \cdot y} \phi(x)} dx \\ &= \int_{\mathbb{R}^n} e^{ix \cdot y} \overline{\phi(x)} dx\end{aligned}$$

(b) TODO

Problem 2. TODO

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Solution. TODO

Problem 3. TODO

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Solution. TODO

Problem 4. TODO

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Solution. TODO

Problem 5. TODO

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Solution. TODO

Problem 6. TODO

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Solution. TODO

Problem 7. TODO

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Solution. TODO