

MATH 432/532 SPRING 2017
HOMEWORK 7
DUE FEBRUARY 24, 2017.
INSTRUCTOR: ROBERT LIPSHITZ

Problems:

- (1) Let $\gamma: \mathbb{R} \rightarrow \mathbb{R}^3$ be a smooth curve. Explain in what sense the definition of the velocity $\gamma'(t_0)$ from this course (and Lee's book) agrees with the definition from the first time you learned multi-variable calculus.
- (2) Lee, Problem 3-4.
- (3) Lee, Problem 3-6.
- (4) Lee, Problem 3-8.

Challenge problems (required for Math 532, optional for 432):

- (5) Lee, Problem 3-5.

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