MATH 33 - Analytic Geometry and Calculus III, Review exercises.

Sequences and series

Section Name	**Section Number and Exercises** (6th edition)	**Section Number and Exercises** (7th edition)
Sequences	12.1, p. 720: 1, 2, 19–29.	11.1, p. 724: 1, 2, 23–33.
Series	12.2, p. 730: 1, 3, 5, 21–31, 47.	11.2, p. 730: 1, 3, 5, 27–37, 57.
Integral Test	12.3, p. 739: 3–10.	11.3, p. 745: 3–10.
The Comparison Tests	12.4, p. 745: 1–10.	11.4, p. 750: 1–10.
Alternating Series	12.5, p. 749: 1–9.	11.5, p. 755: 1–9.
Absolute Convergence, Ratio & Root tests	12.6, p. 755: 1–10.	11.6, p. 761: 1–10.
Strategy testing series	12.7, p. 758: 1–10.	11.7, p. 764: 1–10.
Power series	12.8, p. 763: 1–7.	11.8, p. 769: 1–7.
Representation of functions as power series	12.9, p. 767: 3, 5, 15.	11.9, p. 775: 3, 5, 15.
Taylor and McLaurin Series	12.10, p. 783: 10–20, 25.	11.10, p. 789: 10–20, 25.
Applications of Taylor polynomials	12.11, p. 791: 3, 5, 13, 15.	11.11, p. 798: 3, 5, 13, 15.

Vectors and the geometry of space

Section Name	**Section Number and Exercises** (6th edition)	**Section Number and Exercises** (7th edition)
Three dimensional coord. systems	13.1, p. 805: 1–4, 7, 8, 9, 15.	12.1, p. 815: 1–4, 7, 8, 9, 15.
Vectors	13.2, p. 813: 7–12, 17, 19, 21.	12.2, p. 822: 9–14, 19, 21, 23.
The dot product	13.3, p. 821: 6–9, 15, 21, 23, 35, 37.	12.3, p. 830: 6–9, 15, 21, 23, 39, 41.
The cross product	13.4, p. 828: 1–7, 29, 30, 33.	12.4, p. 838: 1–7, 29, 30, 33.
Equations of lines and planes	13.5, p. 838: 1, 2–7, 23–30.	12.5, p. 848: 1, 2–7, 22–30.

Vector functions

Section Name	**Section Number and Exercises** (6th edition)	**Section Number and Exercises** (7th edition)
Vector functions and space curves	14.1, p. 858: 4, 15, 19–24.	13.1, p. 858: 4, 17, 21–26.
Derivatives and integrals of vector functions	14.2, p. 864: 9–11, 17, 21–25.	13.2, p. 876: 9–11, 17, 21–25.
Arc length and curvature	14.3, p. 872: 1–4, 13, 14, 17, 18.	13.3, p. 884: 1–4, 13, 14, 17, 18.

Partial derivatives

Section Name	**Section Number and Exercises** (6th edition)	**Section Number and Exercises** (7th edition)
Functions of several variables	15.1, p. 901: 2, 11, 25, 30, 39.	14.1, p. 912: 2, 14, 27, 32, 43.
Limits and continuity	15.2, p. 913: 8–16, 39–41.	14.2, p. 923: 8–16, 39–41.
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Tangent planes and linear approximations	15.4, p. 935: 1–4, 11, 19, 21.	14.4, p. 946: 1–4, 11, 19, 21.
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Multiple integrals

Section Name	**Section Number and Exercises** (6th edition)	**Section Number and Exercises** (7th edition)
Double integrals over rectangles	16.1, p. 994: 1, 3.	15.1, p. 1005: 1, 3.
Iterated integrals	16.2, p. 1000: 3–9, 15–18, 25–27.	15.2, p. 1011: 3–9, 15–18, 25–27.
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