ssignment Sheet

: Calculus I

ates	Daily Learning Objectives Students will learn:	Assignment to be Completed by Class Start Unless Otherwise Indicated
3/22/2021	❑ How to find the volume of a solid of revolution using the disk or washer method and the volume of a solid with known cross sections.	❑ Read: Section 7.2, pp 454-460. ❑ Upload homework: Section 7.1, questions 5, 7, 9, 13, 15, 17, 23, 29, 31 (a and b), 37, 5 450-453.
3/24/2021	❑ How to find the volume of a solid of revolution using the shell method, and compare the applications of the disk and shell methods.	❑ Read: Section 7.3, pp 465-469. ❑ Upload homework: Section 7.2, questions 5, 7, 9, 13(d), 19, 21, 31, 37, 47, 53, 73, pp 4
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4/5/2021	❑ How to find the arc length of a smooth curve and the area of a surface of revolution.	❑ Read: Section 7.4, pp 474-480. ❑ Upload homework: Section 7.3, questions 5, 7, 9, 11, 13, 15, 19, 29 (a and c), 39, 47, p
4/7/2021	❑ How to find the center of mass in linear and two-dimensional systems and in a planar lamina, and the centroid of a region.	❑ Read: Section 7.6, pp 494-501. ❑ Upload homework: Section 7.4, questions 5 (a and b), 7, 11, 15, 19, 25, 33, 37, 39, 59, ❑ *(Note on TI-84: key 2nd then 0 to go to catalog, scroll to sinh; for #25, key MATH then 9* ❑ Submit Quiz 7-1 (covers sections 7.2 and 7.3). Due Saturday 4/10/2021 at 11:55 pm E
4/12/2021	❑ To become more proficient at finding area, volume and arc length using integration.	❑ Upload homework: chap 7A Study Guide.
4/14/2021	❑ How to find work done by a constant force and by a variable force.	❑ Read: Section 7.5, pp 485-490. ❑ Upload homework: Section 7.6, questions 5, 7, 9, 15, 17, 21, 27, 31, 33, 49, pp 502-50 ❑ Submit chap 7A Test (covers sections 7.1 through 7.4). Due Saturday 4/17/2021, 11:55

4/19/2021	❑ How to find fluid pressure and fluid force on horizontal and vertical surfaces.	❑ Read: Section 7.7, pp 505-508. ❑ Upload homework: Section 7.5, questions 5, 7, 9, 11, 17 (a & b), 21, 23, 29, pp 491-49
4/21/2021	❑ More about the use of integration to find work done, center of mass, centroids, fluid pressure and fluid force. ❑ How to apply integration rules learned thus far.	❑ Read: Section 8.1, pp 516-519. ❑ Upload homework: Section 7.7, questions 3, 5, 13, 15, 23, 29, pp 509-510. ❑ Upload homework: chap 7B Study Guide.
4/26/2021	❑ How to approximate a definite integral using the Trapezoidal Rule and Simpson's Rule and how to analyze approximation errors.	❑ Read: Section 8.6, pp 559-563. ❑ Upload homework: Section 8.1, questions 3, 4, 5-13(odd), 17, 19, 33, 35, 39, 45, 47, 5 520-522.
4/28/2021	❑ How to find an antiderivative using integration by parts. ❑ How to use a tabular method to perform integration by parts.	❑ Read: Section 8.2, pp 523-528. ❑ Upload homework: Section 8.6, (Numerical Integration) questions 3, 7, 11, 21, 25, 31, p ❑ Submit chap 7B Test (covers sections 7.5 through 7.7). Due Saturday 5/1/2021, 11:55
5/3/2021	❑ How to use powers of sine and cosine, powers of secant and tangent, and sine-cosine products with different angles to solve trigonometric integrals.	❑ Read: Section 8.3, pp 532-537. ❑ Upload homework: Section 8.2, questions 5-17 (odd), 21, 27, 29, 47, 61, 87 (a & b), pp
5/5/2021	❑ How to use trigonometric substitution to solve integrals and model and solve real-life applications using integrals.	❑ Read: Section 8.4, pp 541-546. ❑ Upload homework: Section 8.3, questions 3, 7, 11, 13, 23, 31, 61, 63, 65, 69, 73, 75, p ❑ Submit Quiz 8-1 (covers sections 8.2 and 8.6). Due Saturday 5/8/2021, 11:55 pm ET.
5/10/2021	❑ To understand the concept of partial fraction decomposition and how to use it to integrate rational functions.	❑ Read: Section 8.5, pp 550-556. ❑ Upload homework: Section 8.4, questions 1, 5, 9, 13, 19, 23, 29, 33, 39, pp 547-549.

5/12/2021	❑ To become more proficient at using the integration techniques and applications used in chapter eight.	❑ Upload homework: Section 8.5, questions 5, 7, 13, 17, 21, 25, 37, 38, 39, pp 557-558. ❑ Submit Quiz 8-2 (covers sections 8.4 and 8.5). Due Saturday 5/15/2021, 11:55 pm ET.
5/17/2021	❑ To use the differentiation and integration techniques and their applications learned thus far to prepare for the final exam.	❑ Upload homework: Final Study Guide, Part A.
5/19/2021	❑ To use the differentiation and integration techniques and their applications learned thus far to prepare for the final exam.	❑ Upload homework: Final Study Guide, Part B.

Final open on 5/21/21 at 12:01 am ET and close on 5/28/20 at 11:55 pm ET.