

MATH 1042 RECOMMENDED HOMEWORK PROBLEMS FALL 2017

Text: **1. James Stewart**, *Calculus, Early Transcendentals*, 8th Edition, Cengage Learning.

2. Math 1042 ADDITIONAL Homework Problems

You are expected to solve **ALL** of the problems listed here and **write out** your solutions. The problems whose numbers are not boxed you will also need to do on WebAssign (where they may be slightly modified).

Chapter 5: Integrals

5.2: 37, **39**, **40**, 47, **48**, **49**, **51**, **52**, **53**

5.3: 3, **4**, 7, **8**, **10**, 11, **12**, 13, **14**, **16**, **17**, **18**, 19, **20**, 21, 23, **24**, 25, **26**, 27, **28**, 29, 31, **32**, **34**, 35, 37, 39, **40**, **42**, **45**, **47**, 53, 55, 59, 61, **62**, 63, **64**, **65**, 73, 74

5.4: **10**, 11, **14**, **15**, 18, **29**, 31, **32**, **36**, 37, 38, **39**, 43, 49, 50, 51, 59, **60**, 61, 62, 64

5.5: 1, **2**, **6**, **8**, **11**, **12**, **15**, **16**, **18**, **20**, **27**, **30**, **31**, **32**, 39, **42**, **43**, 44, 45, **46**, 47, 48, **58**, **66**, 67, 68, **79**, 81, 82

Chapter 6: Applications of Integration

6.1: 1, 2, 3, 4, 9, 11, 13, **14**, **16**, 17, **18**, **20**, **22**, 24, **29**

6.2: 1, **2**, 3, **4**, 5, **6**, 7, **8**, 9, **10**, 11, **12**, 13, 14, 15, **17**, **19–30** (in Problems 19–30 only set up the integrals, do not evaluate them), 54, 55, 56, 57, 58, 59. Also do **A6: 1**

Chapter 7: Techniques of Integration

7.1: 1, **2**, 3, 5, 7, 9, 10, 11, **12**, **13**, **23**, 24, 26, **27**, **31**, **33**, **37**, 41, 57, **58**, **65a**.

7.2: 1, 3, **4**, 7, **9**, 11, **12**, **15**, 16, **17**, 21, **22**, 23, 25, 27, **28**, 29, **30**, 33, 34, 35, **38**, **56**, 57, **58**, 61, 62, 63, 65. Also do **A7: 1, 2**

7.3: **1**, 2, 3, 4, **5**, **6**, 7, **8**, 9, **10**, **11**, 12, 13, **14**, 17, **20**, 21, 37

7.4: **1**, 2, **3**, 4, **7**, 8, 9, **10**, 12, **15**, **16**, 17, 19, **21**, **22**, 23, **28**, 64, 65

7.5: 1, 3, 5, **6**, 7, 8, **9**, 13, 16, **18**, 19, 20, 22, **25**, 37, **38**, 54, 57, **59**, 60, **73**

7.8: 1, **2**, 3, 5, 6, 7, 9, 11, 13, 14, 15, 17, 18, **19**, 21, **22**, 23, **24**, **27**, 29, 31, 32, 39, 40, 41, **42**, 43, **44**, **45** (in Problems 44, 45, make a **rough** sketch, do not use a graphing calculator), **49**, **50**, **52**

Chapter 11: Infinite Sequences and Series

11.1: 1, **2**, **3**, **4**, 5, **7**, 23, **25**, **26**, **27**, **28**, 29, 30, **31**, **32**, **33**, **34**, 35, **36**, 37, 38, **39**, **40**, 41, 42, 44, 45, 47, **48**, 49, 50, **51**, 53, 54, **55**, 56, **72**, 73, **74**, 75, **77**. Also do **A11: 1**

11.2: 1, 3, **4**, 15, **16**, 17, 18, 19, **20**, **21**, 22, 23, **24**, **25**, **26**, 27, **29**, **30**, 31, **32**, **33**, **34**, **35**, **36**, **37**, **38**, **39**, **40**, 43, **44**, **46**, 47, 57, 59, **60**, **61**, **63**, 67. Also do **A11: 2, 3, 4**

11.3: 7, 8, **9**, **10**, **15**, **17**, **21**, 27, **29**

11.4: 1, 2, **3**, **5**, **7**, **8**, **9**, **10**, **11**, **13**, **15**, **19**, **21**, **23**, **24**, **25**, **27**, **28**, 31, **32**,
Also do **A11: 5abcd**

11.5: 2, **3**, **4**, **5**, 7, **9**, **10**, **11**, **12**, **13**, **14**, **17**, **18**, **19**, **20**

11.6: 1, **2**, **4**, **5**, **6**, 7, 9, 10, **11**, **12**, 13, 14, **15**, **16** (Problems 7, 9, 12, 13, 15, 16, solve in two ways: (1) using the Root Test and (2) using the Ratio Test), 17, 18, **19**, 25, **26**, **27**, 28, 29, **30**, **31**, **32**, **33**, **34**, **35**, 37. Also do **A11: 5ef**

11.7: **1**, **3**, **4**, **5**, **6**, **7**, **9**, **11**, **13**, **14**, **15**, **16**, **18**, **19**, **21**, **22**, **23**, **24**, **26**, **28**, **31**, **33**

11.8: 3, 4, 5, 6, 7, **8**, 9, **11**, **13**, 14, 15, 17, **18**, 19, 29, 30

11.9: 3, **4**, 5, **6**, 7, 8, 13, **14**, 15, 16, 17, 25, **26**, 27, 28

11.10: 3, 4, **5**, **6**, **7**, **8**, **9**, **19**, **21**, **22**, **23**, **24**, **25**, **26** (in Problems 21–26, only find the **first four** nonzero terms of the Taylor series), 35, 37, **38**, 39, 40, **54**, 55, 56, 73, 74, **75**, 76

11.11: **3**, 5, 6, **7**, **8**, 9 (in Problems 3–9, do not graph f and T_3)