MATH 1042   RECOMMENDED HOMEWORK PROBLEMS   FALL 2018

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

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.

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.

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**.

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, **58**, 59, **60**, **61**, **62**, **63**, 67.

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

11.4: 1, 2, **3**, **5**, **7**, **8**, **9**, **10**, **11**, **13**, **15**, **17**, **19**, **21**, **23**, **24**, **25**, **27**, **28**, 31, **32**,

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.

11.7: **1**, **3**, **4**, **5**, **6**, **7**, **9**, **11**, **13**, **14**, **15**, **16**, **18**, **19**, **21**, **22**, **23**, **24**, **25**, **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)