

Text: Reconceptualizing Mathematics, 2<sup>nd</sup> Edition by Sowder, Sowder, & Nickerson. W.H. Freeman, 2014  
 Math 13800 web page: [www.math.purdue.edu/MA13800](http://www.math.purdue.edu/MA13800)

| Lesson | Section | Page         | Problems  |
|--------|---------|--------------|---|
| 1      | 12.1    | p245         | 1aceg, 5b, 7acf, 9bdfi, 11, 12, 13, 14ab, 15 Print out and bring worksheet for L2.        |
| 2      | 12.2/3  | p253<br>p258 | 1, 2, 4, 5, 8, 9, 11c<br>1b, 1defgh(write a function rule for each of these), 2a, 3a, 4ac |
| 3      | 12.4    | p266         | 1, 5, 7, 10, 12bd, 20   |
| 4      | 12.5    | p276         | 2, 4bc, 5, 11, 12, 14b, 15  |
| 5      | 13.1    | p287         | 3, 6, 7, 10   |

Note: Please print off or buy graph paper. Using tick marks on notebook paper is not acceptable.  
 Bring some to class and also use it for your homework unless you are making *qualitative* graphs.  
 Please bring a ruler to class.

|   |      |      |  |
|---|------|------|--|
| 6 | 13.2 | p295 | 1abde, 5, 6, 9, 10 <i>You will need 4 sheets of graph paper for the next class.</i>  |
| 7 | 13.4 | p308 | 1, 2bd, 3ab, 4b*, 6* (*make a table), supplementary ex 1a,<br>use graph paper and neg & pos $x$ -values for supplementary 1d |

**No Class will be held on Friday, January 29, 2016 ☺**

|    |                                   |  |                          |
|----|-----------------------------------|--|--------------------------|
| 8  | NCTM Illuminations                | Lesson for grades 6-8 “Patterns and Functions”                                 | Assignment #8 worksheet  |
| 9  | NCTM Illuminations                | Lesson for grades 6-8 “One Grain of Rice” and for grades 9-12 “Drug Filtering” | Assignment #9 worksheet  |
| 10 | inverse and logarithmic functions |  | Assignment #10 worksheet |

**Exam 1 Tuesday, February 9, 2016 at 6:30 pm in WTHR 104**

**No class will be held on Wednesday, February 10, 2016**

|    |        |              |   |
|----|--------|--------------|---|
| 11 | 14.1   | p315         | 2(Label the 5 parts of the graph A, B, C, D, E. Label the 5 parts of your story and the 5 parts of your new graph with the same letters.), 3, 8(hrs and min), 9ab |
| 12 | 14.3   | p323         | 2(use negative speeds), 5, 6bd, 7b, 8c, 9ab   |
| 13 | 14.4   | p328         | 1ab(copy graph and explain), 3, 4ab, 6, 7   |
| 14 | 15.1   | p338         | 3, 5, 7, 9, 11, 13, 16, 18, 19, 20bd, 21, 22bd  |
| 15 | 15.2   | p345         | 6, 9, 12, 17, 21, 22, 23, 25, 27a, 30   |
| 16 | 15.3   | p353         | 1*, 6, 7*, 11* *Make graphs large enough to fill one side of a page of graph paper. Note that instructions for #7,11 are at the bottom of page 354.               |
| 17 | 15.4   | p358         | 1, 2, 4a*, 5, 9, 12* (*use an entire side of graph paper for each)  |
| 18 | 15.5/6 | p365<br>p370 | 1c, 2bc, 3, 4(break down into TWO function machine rules), 10 (do only $3 \times 4 \times 6$ )<br>2, 3  |
| 19 | 27.1   | p610         | 2, 4, 5, 6  |
| 20 | 27.2   | p617         | 3, 4, 5, 6, 7, 8, 9bd, 13abdf, 15ab, 24a, 26  |

**Exam 2 Monday, March 7, 2016 at 8:00 pm in WTHR 104**

21 28.1 p634 2, 3, 7, 9, 10

**No class will be held on Friday, March 11, 2016**

22 28.2 p638 2, 4, 6, 8, 10

23 28.3 p643 3, 6abcd, 7, 8, 10

24 28.4 p649 2, 4, 6, 7, 9, 11

25 29.1/2 p659 2, 3 (top of page) p665 3, 4, 5, 6, 8, 9

*Please bring a compass and protractor to the next class. Have graph paper and unlined paper with you.*

26 29.4 p671 1, 2, 3 (top of page)

30.1 p678 2a(show arithmetic with % to nearest 0.1 and angle to nearest degree), 2b\*, 3\*(\*use an entire side of graph paper), 4 and 5- print out from *excel*, 6, 7, 8bc

27 30.2 p686 2a, 3, 4a, 6 (Make a histogram by hand. Use 0-4, 5-9, 10-14, etc.)

28 30.3 p693 3, 4\*, 5\*abcde (\*make up a data set when possible), 6, 9

29 30.4 p701 1, 2(write data sets for ea), 3, 5, 9, 11, 13, 15, 16

30 30.5 p708 1(do work by hand), 2, 5, 8a(subtract 5) b(divide by 5). Use *excel* or a calculator to do the calculations for problems 5 and 8.

Do the standard deviation by hand for this set of numbers: 2, 3, 7, 9, 10, 11

**Exam 3 Monday, April 11, 2016 at 8:00 pm in WTHR 104**

**No class will be held on Wednesday, April 13, 2016**

31 30.6 p716 1ab(line plot), 2, 3, 5, 6a (line plot)

32 30.6/7 p716 4, 8, 9, 10, 11a(show z-scores), c(400 six-year-olds: how many are taller than 48.6 in?; how many are shorter than 44.4 inches?), 13, 14, 16

p721 1, 2

33 33.1 p767 1, 2(refer to the table on p634 and make a new table of sums), 3, 4, 6

34 33.2 p775 1, 2, 4ab, 5ab, 6b, 9

35 33.2 p775 10, 11, 12, 13, 16, 17