Math 31 to Math 13 Transition

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Background: Students in the Business School who do well in the Math 30–31 sequence may wish to go on to take Math 13, 14, 53, etc. The rationale is that more math is always better for students with the capacity to study it. Applications to MBA programs will be strengthened by more math on a student's transcript. A math minor is not too difficult to complete and I hope that talented Business majors will consider it.

Students making this transition must be willing to get up to speed with certain material from Math 11 and 12 not covered in Math 30 and 31. The most significant topic is the calculus of trigonometric functions. A good high school background in trigonometry is very desirable, although an especially talented student can make up the deficiency without it.

The suggested problems below come from Part 1 of Thomas/Finney's Calculus (the SCU edition). Students planning to take Math 13 should work through them and seek help if any of them prove baffling. The student's current Math 31 teacher, Prof. Frank Farris, and the future Math 13 professor are all good sources of help.

Read 2.6, 2.7, 2.8, and 4.4

Do (at least) the following problems
2.6/ 1, 5, 9, 23, 29
2.7/ 1, 3, 5, 7, 9, 11, 13, 21, 23, 29, 37, 53
2.8/ 1, 3, 5, 7, 9
3.1/ 15
3.2/ 11, 31
3.4/ 23
3.5/ 5
Section 3.7 is not covered in Math 30-31. It is not central to Math 13, but students should have a look at it.
4.4/1, 3, 7, 9, 11, 13, 15, 17, 27, 29
4.7/ 17, 25, 27
4.8/ 9, 11, 17
5.2/ 21, 23
Sections 5.3 and 5.4 are not covered in Math 30–31. They are not too important for Math 13, but a student planning to take Math 21 should read these sections and do some of the easier odd problems.

Finally: Students planning to make this transition should inform their Math 13 instructor about their unusual background.