

# Professional Vita

J. Douglas Faires  
Professor Emeritus  
Department of Mathematics and Statistics  
Youngstown State University

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## Degrees

D. Sc., Youngstown State University, 2006, Honorary  
Ph. D., University of South Carolina, 1970, Mathematics  
M. S., University of South Carolina, 1965, Mathematics  
B. S., Youngstown University, 1963, Mathematics

## Academic And Professional Experience

Youngstown State University, 2006–Present, Professor Emeritus of Mathematics  
Youngstown State University, 1980–2006, Professor of Mathematics  
Westminster College, Oxford, 1993–94, Visiting Professor of Mathematics  
University of Sussex, 1985–86, Visiting Professor of Mathematics  
Youngstown State University, 1975–80, Associate Professor of Mathematics  
Youngstown State University, 1969–74, Assistant Professor of Mathematics  
University of South Carolina, 1967–69, Instructor of Mathematics  
North American Aviation Co., Space and Information Systems Division, Downey, California, 1963,  
Research Engineer

## National Professional Activities

Principal Investigator of the MAA-NSF grant DMS-0241090 to support Undergraduate Research Conferences in Mathematics 2003–present  
Chair of the Oversight Board for the YSU Center for Undergraduate Research in Mathematics  
National Director of the AMC–10 Competition of the American Mathematics Competitions, 1999–2007  
National Co-Director of the AMC–12 Competition of the American Mathematics Competitions, 1999–2007  
Judge for the COMAP International Mathematical Modeling Competition, 1998–present  
Member of the Mathematical Association of America Student Activities Committee 2002–present  
Member of the Mathematical Association of America Undergraduate Research Committee 2005–present

Board of Directors for the American Mathematics Competitions, 1997–2007  
Member of the Joint Data Committee for AMS-MAA-ASA-SIAM, 2000–2006  
Pi Mu Epsilon, National Mathematics Honorary Society Past–President 2002–2005  
Pi Mu Epsilon, Member of the Council 1987–2005  
Member of the Richard Andree Prize Committee for Pi Mu Epsilon Journal 1987–2005  
Pi Mu Epsilon, National Mathematics Honorary Society President 1999–2002  
Pi Mu Epsilon, President-Elect 1996–1999  
Pi Mu Epsilon, editor of the Program for the National Meeting 1992–1997  
Mu Alpha Theta, High School Mathematics Honorary Society, Board of Governors representing the Mathematical Association of America 2002–2003  
Mathematical Association of America, Governor of the Ohio Section 1997–2000  
Board of Directors for the Mathematical Olympiad 2001, 1998–2002  
Faculty Consultant for Educational Testing Service Advanced Placement Examination in Calculus, 1992–2002.  
Consultant and Lecturer in Numerical Analysis for New England Actuary Seminars, 1995  
Consultant for the mathematics programs: Saginaw Valley State University, Michigan, 1994; Edinboro University of Pennsylvania, 1996; Clarion University of Pennsylvania, 1997, Slippery Rock University of Pennsylvania, 2002

## **Professional Honors And Awards**

Honorary Doctor of Science awarded by Youngstown State University in May 2006  
MacDuffee Award by Pi Mu Epsilon for Lifetime Service 2005 (5 awarded in 90 years)  
University Scholars, Honors Professor of the Year, 2005–2006  
Youngstown State University, Distinguished Professor for Scholarship, 2005–2006  
Youngstown State University, Distinguished Professor for Professional Service, 2002–2003  
Youngstown State University, Distinguished Professor for University Service, 1998–99  
Youngstown State University, Distinguished Professor for Teaching, 1995–96  
Outstanding Ohio College-University Teacher of Mathematics, Ohio Section of MAA, 1996  
Centurians Professor of the Year, 1995–1996;  
University Scholars, Honors Professor of the Year, 1995–96

## **Professional Memberships**

Society for Industrial and Applied Mathematics  
The Mathematical Association of America  
The American Mathematical Society  
Pi Mu Epsilon

# Scholarly Works

## Books

1. NUMERICAL ANALYSIS, 1978, Prindle, Weber & Schmidt, Inc., Boston, MA, 579 pages. (with R. L. Burden and A. C. Reynolds). Reprinted by the Tan Chiang Book Co. for Chinese distribution.
2. NUMERICAL ANALYSIS (Second Edition), 1981, Prindle, Weber & Schmidt, Boston MA, 598 pages. (with R. L. Burden and A. C. Reynolds). Reprinted by the Tan Chiang Book Co. for Chinese distribution. Reprinted by Wadsworth International for international distribution.
3. CALCULUS AND ANALYTIC GEOMETRY, 1983, PWS Publishing, Boston, MA, 1158 pages. (with Barbara T. Faires).
4. NUMERICAL ANALYSIS (Third Edition), 1985. PWS Publishing, Boston MA, 676 pages. (with R. L. Burden). Reprinted by the Tan Chiang Book Company for Chinese distribution. Reprinted by Wadsworth International for international distribution. Translated to Spanish by Wadsworth International for international distribution.
5. CALCULUS (Second Edition), 1988, Random House, Inc., New York, 1113 pages. (with Barbara T. Faires).
6. NUMERICAL ANALYSIS (Fourth Edition), 1988, PWS–Kent Publishing, Boston MA, 722 pages. (with R. L. Burden). Reprinted by Wadsworth International for international distribution.
7. CALCULUS OF ONE VARIABLE, 1989, Random House, Inc., New York, 837 pages (with Barbara T. Faires).
8. NUMERICAL ANALYSIS (Fifth Edition), 1993, PWS Publishing, Boston MA, 768 pages (with R. L. Burden). Reprinted by Wadsworth International for international distribution.
9. NUMERICAL METHODS, 1993 PWS Publishing, Boston MA, 503 pages (with R. L. Burden). Translated into German in 1995.
10. Editorial Advisory Board of the 30th Edition of the CRC STANDARD MATHEMATICAL TABLES, published in 1996 by CRC Press.
11. NUMERICAL ANALYSIS (Sixth Edition), 1997, Brooks/Cole Publishing, Pacific Grove CA 811 pages (with R. L. Burden). Reprinted by International Thomson Publishing for international distribution. Translated into Spanish in 1997.
12. 12. PRECALCULUS, 1997, Brooks/Cole Publishing, Pacific Grove CA, pages 389 (with J. DeFranza).
13. NUMERICAL METHODS (Second Edition), 1998, Brooks/Cole Publishing Pacific Grove CA, 593 pages (with R. L. Burden).
14. ENCYCLOPEDIA OF MATHEMATICS, 1998, Numerical Analysis primary article, Kluwer Academic Publishing (approximately 5000 words).
15. PRECALCULUS (Second Edition), 2000, Brooks/Cole Publishing, Pacific Grove CA, pages 432 (with J. DeFranza). Translated into Spanish in 2001.
16. NUMERICAL ANALYSIS (Seventh Edition), 2001, Brooks/Cole Publishing, Pacific Grove CA, 841 pages (with R. L. Burden). Translated into Spanish, Chinese, Portuguese, Korean, and German.
17. Editorial Advisory Board of the 31st Edition of the CRC STANDARD MATHEMATICAL TABLES, published in 2002 by CRC Press.
18. NUMERICAL METHODS (Third Edition), 2003, Brooks/Cole Publishing–Thomson Learning Pacific Grove CA, 622 pages (with R. L. Burden). Simultaneously released in a Spanish translation.
19. Editorial Advisory Board of the 32st Edition of the CRC STANDARD MATHEMATICAL TABLES, published in 2004 by CRC Press.

20. PRECALCULUS (Third Edition), (with J. DeFranza), 2004, Brooks/Cole Publishing, Belmont CA, pages 432 (with J. DeFranza).
21. NUMERICAL ANALYSIS (Eighth Edition), 2005, Brooks/Cole Thomson Learning, Belmont CA, 847 pages (with R. L. Burden).
22. FIRST STEPS FOR MATH OLYMPIANS, 2006, The Mathematical Association of America, Washington DC, 307 pages.
23. PRECALCULUS (Fourth Edition), (with J. DeFranza), 2006, Brooks/Cole Thomson Learning, Belmont CA pages 430 (with J. DeFranza).

## Other Publications

1. The MAA-NSF Undergraduate Student Conference Program, in *Proceeding of the Conference on Promoting Undergraduate Research in Mathematics*, edited by Joseph Gallian, pp 251–254.
2. The YSU Center for Undergraduate Research in Mathematics, in *Proceeding of the Conference on Promoting Undergraduate Research in Mathematics*, edited by Joseph Gallian, pp 255–260.
3. *A Graduate School Primer*, Math Horizons, September, 1999, pp. 22–25.
4. *Identifying and Developing Mathematically Promising Students through Honors Calculus and the University Scholars Program*, (with John P. Holcomb and Nathan P. Ritchey), in *Developing Mathematically Promising Students*, published by the National Council of Teachers of Mathematics, 1999, pp. 263–267.
5. *Technical Writing for Mathematical Projects*, (with C. A. Nelson), in *Using Writing to Teach Mathematics*, MAA Notes Number 16, The Mathematical Association of America, 1990, pp. 42–47.
6. Ascent, descent, nullity, and defect of products of operators, *Indiana University Mathematics Journal*, (with J. Buoni) vol.25(1976) pp. 703–707.
7. Comparison of the states of closed linear transformations, *Pacific Journal of Mathematics*, Vol. 54, No. 1, (1974) 123–133.

## Writing Currently in Progress

The Contest Problem Book VIII American Mathematics Competitions 2000-2007 AMC 10 Contests, to be published in late 2007 or early 2008 by the MAA (With David M. Wells)

The Contest Problem Book IX American Mathematics Competitions 2001-2007 AMC 12 Contests, to be published in late 2007 early 2008 by the MAA (With David M. Wells)

NUMERICAL METHODS (Fourth Edition), in revision, Brooks/Cole Thomson Learning, Belmont CA, approximately 640 pages (with R. L. Burden).