

BOWDOIN COLLEGE



, 2, 200

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DEGREES

Let U and V be subspaces of \mathbb{R}^n . Then $U \cap V$ is a subspace of \mathbb{R}^n .

$$\dim(U + V) = \dim(U) + \dim(V) - \dim(U \cap V)$$

(Grassmann's Formula)

Let U and V be subspaces of \mathbb{R}^n . Then

$$\dim(U + V) + \dim(U \cap V) = \dim(U) + \dim(V)$$

Let U and V be subspaces of \mathbb{R}^n . Then $U \cap V$ is a subspace of \mathbb{R}^n .

Let U and V be subspaces of \mathbb{R}^n . Then

$$\dim(U + V) = \dim(U) + \dim(V) - \dim(U \cap V)$$

$$\dim(U + V) + \dim(U \cap V) = \dim(U) + \dim(V)$$

**ONE HUNDRED NINETY-EIGHTH COMMENCEMENT
OF BOWDOIN COLLEGE**

1918

IN THE EVENING OF
FRIDAY, JUNE 7, 1918

AT THE COMMENCEMENT EXERCISES
Held in the Chapel

1. $\frac{1}{x^2} = x^{-2}$
 $\frac{d}{dx} x^{-2} = -2x^{-3} = -\frac{2}{x^3}$

2. $\frac{1}{x^3} = x^{-3}$
 $\frac{d}{dx} x^{-3} = -3x^{-4} = -\frac{3}{x^4}$

3. $\frac{1}{x^4} = x^{-4}$
 $\frac{d}{dx} x^{-4} = -4x^{-5} = -\frac{4}{x^5}$

PROBLEM SET 10: DIFFERENTIATION

1. $\frac{d}{dx} x^2 = 2x$
 $\frac{d}{dx} x^3 = 3x^2$
 $\frac{d}{dx} x^4 = 4x^3$

2. $\frac{d}{dx} x^5 = 5x^4$

THESE DOCUMENTS
SONT EN PARTIE
D'UN VOLUME

DE LA COLLECTION
"LES DOCUMENTS
DE LA BIBLIOTHEQUE
NATIONALE"
N° 1000

LES DOCUMENTS
DE LA BIBLIOTHEQUE
NATIONALE

DE LA BIBLIOTHEQUE
NATIONALE
DE LA BIBLIOTHEQUE
NATIONALE

LES DOCUMENTS
DE LA BIBLIOTHEQUE
NATIONALE

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NATIONALE

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DE LA BIBLIOTHEQUE
NATIONALE

1. *Proprietorship*
2. *Partnership*
3. *Corporation*

4. *Trust*
5. *Joint Tenancy*
6. *Life Estate*
7. *Fee Simple*
8. *Leasehold*
9. *Easement*
10. *Condemnation*
11. *Adverse Possession*
12. *Quiet Title*

BETH ANN MUIR MAURA REBECCA MULVANEY	Biology; Minor: Mathematics French and Government	Chelmsford, Massachusetts Ballwin, Missouri
LAURA JEAN NEWMAN JAMES B. NICHOLS MATTHEW FRANCIS XAVIER NORCIA ALEXANDER ISAAC NOSNIK ADIA FAGIN NUNNALLY CHANDLER JAY NUTIK	English and French Physics Religion and Sociology Anthropology; Minor: Asian Studies Government and Romance Languages Philosophy; Minor: Theater	Washburn, Wisconsin Skaneateles, New York Rye, New York Plano, Texas Hanover, New Hampshire New Orleans, Louisiana
SETH JAMES BRYAN OBED CONOR SAVAGE O'BRIEN BARTLY FRANCIS O'CONNOR III DIANA KATHERINE BROOKS O'DONNELL SELVIN OHENE STEPHEN PATRICK O'MALLEY JACOB PATRICK OSSOFF Ö99 JOANNA SOPHIA OSTREM	English and Government Biology Government; Minor: English French Psychology Mathematics; Minor: Chemistry Romance Languages Art History and French	Old Town, Maine Barrington, Rhode Island Dedham, Massachusetts Monmouth, Maine Bronx, New York Portland, Maine Nashville, Tennessee Milton, Massachusetts
IRENE ARUM PAK KATE LISBETH PANTELIDES LAUREN EVE PAPPONE KEVIN U PARK TIMOTHY S. PASAKARNIS	Government; Minor: Asian Studies English; Minor: Music Sociology-Environmental Studies Biology and Economics; Minor: Chemistry Biology-Environmental Studies; Minor: Economics	Tyngsboro, Massachusetts Franklin, Tennessee Weston, Massachusetts Glenview, Illinois South Windsor, Connecticut
SOPO PAT TRAVIS ADAM PATTEN ELISABETH GLASER PEARSON CORINNE JEANNETTE PELLEGRINI AMY BAUMGARTEN PETERSEN EDWARD CARVER PIERCE NADYA ALLEN PINCUS ERICA MARIE PISATURO MICHELLE LYNN PLATT LOUIS VALENTINE PLOUGH KARA KINDER PODKAMINER ANNA ROB PODORE JOSHUA JAMES POLICE STEVEN TIMOTHY POPPER JARED DOUGLAS PORTER LINDSAY TYLER POWERS	Computer Science and Economics Economics; Minor: Mathematics Government; Minor: Sociology Biology; Minor: Education Religion English Romance Languages Art History and Music Art History; Minor: Biology Biology; Minor: French Biology; Minor: Mathematics Spanish History; Minor: Archaeology Government; Minor: Spanish History; Minor: Government History and Visual Arts; Minor: Art History Psychology; Minor: Economics Economics and English	Macau, People's Republic of China York, Maine Kittery Point, Maine Canton, Massachusetts Washington, District of Columbia Yarmouth, Maine Andover, Massachusetts Wakefield, Massachusetts Savannah, Georgia Seattle, Washington Jamesville, New York Cincinnati, Ohio Dedham, Massachusetts Sewickley, Pennsylvania Duxbury, Massachusetts Medway, Massachusetts Weston, Connecticut Saint Louis, Missouri
JUDSON MILLS PRATT-HEANEY WENDY ELIZABETH PRICE		
LAURA ELISABETH QUINLAN Ö02 RYAN MICHAEL JOSEPH QUINN	English and Latin American Studies Economics; Minor: Spanish	Needham, Massachusetts Rumson, New Jersey
DAWN MARIE RACKLIFFE SARAH MARIE RAMEY JASON MICHAEL RAWLINS AMBER FAYE DEROSA REED	Psychology Religion; Minor: English Government and History Visual Arts-Environmental Studies; Minor: Biology	Smithfield, Rhode Island Bethesda, Maryland Bridgewater, Massachusetts Wellington, Maine
JESSICA EDYTHE REUBEN BROOKS HOWARD RICH JANA ALICE RICHARDSON	Anthropology; Minor: Biology Art History; Minor: English English and Theater; Minor: Africana Studies	Houston, Texas Danon, Mo Dedham, Massachusetts

ELEANOR DARROW

ELIZA ANN STEWART Ö01

OWEN DANIEL STRACHAN
JAMES BECKET STROHACKER
BLAKE THOMAS STURTEVANT
EDWARD MICHAEL SWEENEY, JR.
ALISON DIAN SYLVESTER

RACHEL ELISE TANNEBRING
BROOKE CHARLOTTE TANSILL

ELIZABETH ANN TARDIFF
EMILY JANE TAYLOR
JOANIE AINSWORTH TAYLOR
JACQUELINE ANN TEMPLETON
COLIN THOMAS THIBADEAU
WILLIAM BOLTWOOD THOMAS

JULIA BROOKS THOMPSON
CHRISTOPHER DAMON THOMS
COURTNEY ELIZABETH TOLMIE
EMILY TOMPKINS
WORAWAN TOOMMONGKOL

LAUREN DEANNE TRUE
EVELYNE TSENG
DAVID JOSEPH TURCO
JOSEPH PETER TURNER, JR.

ERIC ROBERT TUSTISON

VICTORIA JANE UPSON
CECILY SUZANNE UPTON
TRI VINH VAN Ö02
PATRICK LOUIS VARDARO
MATTHEW SCOTT VOLK
REGINA MARY VON SCHACK

ALLISON ANN WADDELL
BRENDAN MICHAEL WAKEHAM
TOBY ALLAN WALCH
JULIAN YALE WALDO
ERIC JEFFREY WALKER
RYAN WALSH MARTEL
JASMINE YONG WATSON
MICHELLE GRACE WEAVER
ABIGAIL CLARE WEBSTER
ANDREA ZENOBIA LEXINE WEEKS
PATRICK JOHN WELSH
ELIZABETH ANNE WENDELL
KATHERINE MATTHEA WESTLEY
CAROLYN MARIE WESTRA

LAUREN MARIE WHALEY

NICHOLAS COLIN WILLIAMS Ö02
WILEY OTTO WILLMANN

Art History/Visual Arts;
Minor: Women's Studies
History
Anthropology

Lexington, Massachusetts
Shrewsbury, New Jersey
Bedford, New York
Rockville, Maryland
Bangkok, Thailand
Upton, Massachusetts
Peterborough, New Hampshire
North Easton, Massachusetts

North Potomac, Maryland

Rome, Georgia

Wallingford, Connecticut
Shanghai, People's Republic
of China
North Berwick, Maine
New Manila, Philippines

HONORARY APPOINTMENTS

SUMMA CUM LAUDE

ERICA MICHELLE BELLAMY
LEAH DANIA CHRISTENSEN
ANGELA ROSE COMMITO

ANDREW THOMAS DUNN
MAGGIE ANN FRITZ-MORKIN
ABBIE ANN KLEIN

MATTHEW HARRY MAGENHEIM
TRAVIS ADAM PATTEN
MONICA LYNN SKOGE

MAGNA CUM LAUDE

DOMINIQUE CHANTALE ALEPIN
SCOTT ANTHONY BARBUTO
ELIZABETH ANNE BARNEY
SARA STEPHANIE BODNAR
BRIAN EDWARD CALABRESE
SARAH HUILING CHENG
GABRIEL MICHAEL CIVIELLO
AMANDA LEESE COWEN
HANNAH WOOD CURTIS
WILLIAM LEE DAY

AARON MILLER DONOHOE
ARIJ FAKSH
LIESL FINN
CLARE MARIE FORSTIE 002
ARIELE PATRICE HANEK
COLIN CHRISTOPHER HEINLE
NICHOLAS SHARPE HIEBERT
ALLISON CASPAR HINMAN
LEAH BESS HOXIE
JENNIFER RITA LARAIA

NOAH BAKER LONG
ARTHUR DEHON MIDDLETON 001
DIANA KATHERINE BROOKS
O'DONNELL
LAUREN EVE PAPPONE
BROOKS HOWARD RICH
KATHERINE JANE ROBOFF
ALEXANDER MICHAEL ROSATI
JILL MEREDITH SHIREY
ALISON DIAN SYLVESTER

CUM LAUDE

AUDREY ELIZABETH AMIDON
ASHLEY BUHLER BERENDT
HILARY LAUREN BERNSTEIN
DAVID LUCAS B

PHI BETA KAPPA

DOMINIQUE CHANTALE ALEPIN
SCOTT ANTHONY BARBUTO
ELIZABETH ANNE BARNEY
ERICA MICHELLE BELLAMY
SARA STEPHANIE BODNAR
BRIAN EDWARD CALABRESE
SARAH HUILING CHENG
LEAH DANIA CHRISTENSEN
GABRIEL MICHAEL CIVIELLO
ANGELA ROSE COMMITO
AMANDA LEESE COWEN
HANNAH WOOD CURTIS
WILLIAM LEE DAY
BRADLEY PAUL DECKER
AARON MILLER DONOHOE
ANDREW THOMAS DUNN

ARIJ FAKSH
LIESL FINN
MAGGIE ANN FRITZ-MORKIN
ARIELE PATRICE HANEK
COLIN CHRISTOPHER HEINLE
NICHOLAS SHARPE HIEBERT
ALLISON CASPAR HINMAN
LEAH BESSHOXIE
ABBIE ANN KLEIN
JENNIFER RITA LARAIA
ANDREW FLOYD LARSON
NOAH BAKER LONG
EDWARD GEORGE MACKENZIE
MATTHEW HARRY MAGENHEIM
DIANA KATHERINE BROOKS
O'DONNELL

JOANNA SOPHIA OSTREM
LAUREN EVE PAPPONE
TRAVIS ADAM PATTEN
BROOKS HOWARD RICH
ELIZABETH CAROL ROBINSON
KATHERINE JANE ROBOFF
ALEXANDER MICHAEL ROSATI
JILL MEREDITH SHIREY
M 3I 7.5 446.02251 604.86301 R8499 Tc (OBINSON) T507 0 0

Students elected to Phi Beta Kappa wear green and white ribbons on their academic gowns.

HONORANDS OF THE 2003 COMMENCEMENT

MARGARET HAMBURG
DOCTOR OF SCIENCE

Dr. Margaret Hamburg has made significant contributions to medicine and to public policies over the course of her career. She is currently vice president for biological programs at the Nuclear Threat Initiative in Washington, D.C., and is an internationally recognized authority on the threats posed by bioterrorism.

Dr. Hamburg earned her undergraduate degree at Harvard and received her M.D.

GRACE PALEY
DOCTOR OF LETTERS

Grace Paley's short stories and poems document the uncommon lives of everyday people with pathos and humor. Her short stories and essays have appeared in *The New Yorker*, *Esquire*, and *The Atlantic Monthly*; her collections of stories include *The Little Disturbances of Man* (1959), *Enormous Changes at the Last Minute* (1974), *Later the Same Day* (1985), and *The Collected Stories* (1994). Paley taught for 23 years at Sarah Lawrence University, three years at the City University of New York graduate program, and at Syracuse and Columbia universities.

Since her retirement she has taught at Johns Hopkins, Stanford, and Dartmouth. A member of the Academy of American Letters, she has received a John Simon Guggenheim Fellowship, two awards from the National Endowment for the Arts, the Edith Wharton Award (1989), the Rea Award for the Short Story, the Vermont Excellence in the Arts Award (1993), the Lannan Literary Award for Fiction (1997), and *The Reader's Digest*

HONORS IN MAJOR SUBJECTS

The Departments of Art History, Biology, Chemistry, English, Geology, History, Mathematics, Music, Psychology, Romance Languages, and Sociology and Anthropology, and the Biochemistry, Latin American Studies, Neuroscience, and Women's Studies Programs award only one level of departmental honors. Other departments award honors at the levels of Highest Honors, High Honors, and Honors, and the recipients are so designated.

ASIAN STUDIES

High Honors

ANDREW THOMAS DUNN

NISSALEIGH LOHRMANN

Seasonal Acclimation of Antioxidants in Two
Co-Occurring Red Algae with Differing Cold Tolerances

CONOR S

MAGGIE ANN

LATIN AMERICAN STUDIES

Honors

KAREN ELIZABETH FINNEGAN

The Paradox of Pinochet's Rule: Patriarchal Ideology and Women in the Work Force

MATHEMATICS

Honors

JUSTIN MACLEOD FOSTER

Fractals and Fractal Dimension

NIMA SAHAR SOLTANZAD

Complex Variable Methods in Linear Elasticity

KATHERINE ANN STALLKAMP

Spinor Groups and Rotations in n-Dimensions

THOMAS JOHN WRIGHT

The Impossibility of Certain Types of Carmichael Numbers

MUSIC

Honors

STEVEN THOMAS KEMPER

Two Works: Piano Quintet and Music for In the Heart of America

NEUROSCIENCE

Honors

TYLER JOHN MILES DUNPHY

Proctolin Modulation of Two Neural Networks in the Stomatogastric Nervous System of *Homarus americanus*

LEAH BESSHOXIE

Is Laughter the Best Medicine? The Effects of Laughter on Salivary Cortisol and S-IgA Concentrations

THURSTON THORFINN RIDAY

Neuromodulatory Effects of CabTRP on the Pyloric Rhythm of *Panulirus interruptus*

PHYSICS

Highest Honors

AARON MILLER DONOHOE

Biases in Inferred Inter-Annual Variability of Atmospheric CO₂ due to Selective Sampling of Transport Models

MONICA LYNN SKOGE

Numerical Models of Black Hole-Neutron Star Binaries

High Honors

ANDREW MORRIS KNAPP

The Quasi-Equilibrium Approximation for Binary Inspiral: Analytical and Numerical Model Calculations in Scalar Gravity

Honors

GEORGE TAYLOR HUBBARD, JR.

Inferring Temperature Records from Phenology Data by Means of Time Series Analysis

PSYCHOLOGY

Honors

HILARY LAUREN BERNSTEIN

The Role of Metrical Stress in Spoken Word Recognition: Segmentation or Activation?

PATRICK BARRY BURNS

The Relationship between Endogenous Testosterone and Responses to Aggressive Stimuli in Humans

ANNE FENTON CAVANAUGH

Perceived Tension and Emotion in Classical Music

MICHELLE JEAN MERCHANT

Understanding Failure Experiences: Does Concreteness Matter?

DAWN MARIE RACKLIFFE

Moral Motivations as a Factor in Children's Rating of Lies

KATHARINE DIANE SEMRO

Can a Scientific Psychology Incorporate Human Agency?

KATHRYN ELAINE SMITH

Using Failure to Gain Success: Achieving Long-Term Strategy Selection

RELIGION

High Honors

AMY BAUMGARTEN PETERSEN

ÒWe Have Tasted of God and Our Eyes Have Been OpenedÓ: A Postcolonial Reexamination of Peyotism and the Native American Church

Honors

ASHLEY BUHLER BERENDT

Feminist Responses to New Buddhisms: Investigating the Feminization of Buddhism in America

RUSSIAN

Honors

HEA MYUNG KIM

Spiritual Freedom and Demonic Possession in F. M. Dostoevsky's Post-Prison Works

SOCIOLOGY

Honors

LAUREN EVE PAPPONE

ÒI became more open to lifeÓ: Environmental Education at WolfeÕs Neck Farm

JILL MEREDITH SHIREY

Gender Identities Limited: Power and Resistance in the Sri Lankan Garment Industry

STUDENT-DESIGNED MAJOR
IN PHYSICS-MARINE SCIENCE

Honors

LAURA ANNE WINDECKER

Mechanisms of Size-Specific Growth in the Sea Urchin, *Strongylocentrotus droebachiensis*

U.S. Chemical Rubber Company Freshman Award: _____

U.S. Chemical Rubber Company Laboratory Award: _____

Hannibal Hamlin Emery Latin Prize: _____

Nathan Gould Prize: _____

J. B. Sewall Greek Prize: _____

J. B. Sewall Latin Prize: _____

Philo Sherman Bennett Prize:

Jefferson Davis Award:

Dr. Samuel and Rose A. Bernstein Prize:

Class of 1875 Prize in American History:

Sherman David Spector, of the Class of 1950, Award in History:

Edward Sanford Hammond Mathematics Prize:

Smyth Mathematical Prize:

Sue Winchell Burnett Music Prize:

Sumner Increase Kimball Prize:

Munno Neuroscience Prize:

Philip W. Cummings Philosophy Prize:

Edwin Herbert Hall Prize:

Noel C. Little Prize in Experimental Physics:

Frederic Peter Amstutz Memorial Prize:

Edgar Oakes Achorn Prize:

Lea Ruth Thumim Biblical Literature Prize:

Goodwin French Prize:

Russian Prize: [Signature]

Matilda White Riley Prize: [Signature]
Elbridge Sibley Sociology Prize: [Signature]

Bowdoin Dance Group Award: [Signature]

Fritz C.A. Koelln Research Fellowship:

Edward E. Langbein, Sr., Summer Research Award:

Latin American Summer Travel Grants:

Mellon Minority Undergraduate Fellowships:

MELMAC Education Foundation:

National Science Foundation/New England Wild Flower Society Research Fellowship in Conservation Biology:

Paller Research Fellowship:

Public Interest Career Fund Scholarships:

Rusack Coastal Studies Fellowships:

Surdna Foundation Undergraduate Research Fellowships:

Morris K. Udall Foundation Undergraduate Scholarship:

Bowdoin *Orient* Prizes:

James Bowdoin Cup:

Curtis E. Chase Memorial Award:

General R.H. Dunlap Prize:

James S. Lentz Leadership Award:

Will Smith Community Service Award for Men: _____

Annie L.E. Dane Award for Outstanding Leadership: _____

Outstanding First-Year Female Student Athlete: _____

Outstanding First-Year Male Student Athlete: _____

Outstanding Male Athlete: _____

Lucy L. Shulman Award for Outstanding Female Athlete: _____

Society of Bowdoin Women Award: _____

Frederick G.P. Thorne '57 Award for Outstanding Leadership: _____

The Bicknell Award: /
George Levine Memorial Soccer Trophy: /
Christian P. Potholm II Soccer Award: /

Garcelon and Merritt Scholarships:

Barry M. Goldwater Scholarship:

Dr. Ralph Fessenden Goodhue Scholarships:

Timothy and Linn Hayes Scholarships:

Guy Charles Howard Scholarships:

Henry Lincoln Johnson Scholarship:

George and Mary Knox Scholarships:

Lancaster Graduate Scholarships:

Henry W. Longfellow Graduate Scholarships:

Wilmot Brookings Mitchell Graduate Scholarships:

Galen C. Moses Post-Graduate Scholarships:

O'Brien Graduate Scholarships:

Lee G. Paul Scholarships:

Dr. C.N. and A.F. Peters Fund Scholarships:

Robinson-Davis Fund Scholarships: Law School:

Robinson-Davis Fund Scholarships: Medical School:

ACADEMIC APPAREL

1. Hood border colors indicate fields of learning. The colors are as follows:

2. The colors are: Blue, Green, Yellow, Orange, Red, Purple, Grey, and White.

3. The colors are: Blue, Green, Yellow, Orange, Red, Purple, Grey, and White.

4. The colors are: Blue, Green, Yellow, Orange, Red, Purple, Grey, and White.

5. The colors are: Blue, Green, Yellow, Orange, Red, Purple, Grey, and White.

Hood Border Colors Indicating Fields of Learning

Blue	Mathematics
Green	Science
Yellow	Engineering
Orange	Business
Red	Law
Purple	Arts
Grey	Education
White	Health Sciences

RAISE SONGS TO BOWDOIN

1. *Handwritten lyrics for the first stanza, including the title 'RAISE SONGS TO BOWDOIN' and some illegible text.*

2. *Handwritten lyrics for the second stanza, including the title 'RAISE SONGS TO BOWDOIN' and some illegible text.*

3. *Handwritten lyrics for the third stanza, including the title 'RAISE SONGS TO BOWDOIN' and some illegible text.*

