

# MATH 2360-008: FINAL EXAM INFO/LOGISTICS/ADVICE

## • INFO:

LOCATION:	Tuesday (12/08) at 7:30am in MATH 108 (our usual room)	DURATION:	2.5 hrs
PROBLEM COUNT:	Appropriate for a 2.5-hr exam	BONUS COUNT:	At least one

- The FINAL EXAM is **comprehensive**. Expect roughly equal coverage of all chapters covered in the course.
- The FINAL EXAM is **not departmental**, meaning the instructor writes the FINAL EXAM.
- TOPICS CANDIDATE FOR THE EXAM:
  - \* (All 'TOPICS CANDIDATE FOR THE EXAM's from Info/Logistics/Advice for EXAMS 1,2,3)
  - \* LARSON 7.1: Eigenvalues, Eigenvectors & Eigenspaces of a Square Matrix ← Computation & Properties
  - \* LARSON 7.2: Similar Matrices, Diagonalizable Matrices, Diagonalization of a Square Matrix
- TOPICS CANDIDATE FOR BONUS QUESTIONS: (Maximum Bonus Points Possible = 15)
  - \* (All 'TOPICS CANDIDATE FOR BONUS ?'s from Info/Logistics/Advice for EXAMS 1,2,3)
  - \* LARSON 7.3: Symmetric Matrices, Orthogonal Matrices ← Determination & Properties
  - \* ???????
- TOPICS NOT COVERED AT ALL:
  - \* (All 'TOPICS NOT COVERED AT ALL' sections from Info/Logistics/Advice for EXAMS 1,2,3)
  - \* **Proofs of any kind, Graphs of any kind**
  - \* LARSON 7.1: Cayley-Hamilton Theorem (pg 351), Idempotent & Nilpotent Matrices (pg 352)
  - \* LARSON 7.2: Finding a Basis to Diagonalize a Linear Transformation (pg 359),  
Exponential of a Square Matrix  $X: e^X$  (pg 361)
  - \* LARSON 7.3: Orthogonal Diagonalization of a Symmetric Matrix
  - \* LARSON 7.4: Applications of Eigenvalues & Eigenvectors (entire section)
  - \* **Any applications mentioned in other sections.**

## • LOGISTICS:

- All you need to bring are pencil(s), eraser(s) & your Raidercard.
- Do **not** bring a Bluebook, adequate space for solutions will be provided on the FINAL EXAM itself.
- Clear your desk of everything except pencil(s) and eraser(s).
- **Books, notes, notecards, calculators NOT PERMITTED.**
- Mobile devices (phones, tablets, PC's, music, ...) are to be shut off and put away.
- Tissues will be furnished – for allergies, not for sobbing.
- No talking or cheating!
- When you turn in your exam, be prepared to show me your Raidercard if I don't recognize you.
- If you ask to use the restroom during the exam, either hold it or turn in your exam for grading.

## • ADVICE:

- Use the restroom before the exam, if needed.
- Do not be late – since the exam's early in the morning (7:30am), set at least two wake-up alarms.
- Review the slides, past homework, and perhaps even work some similar problems in the textbook.
- Use flashcards to aid in memorization of hard formulas.
- Study for the exam together in groups.
- Show up to extended office hours Monday (12/07) from 8:30am to 3:30pm for last-minute help.
- **SHOW APPROPRIATE WORK!** Attempt bonus question(s).