

# MIDTERM

NAME <i>(Please use capital letters)</i>	
ID NUMBER	

## *Requirements*

- The exam lasts for 2 hours and 10 minutes.
- You must keep your photo ID on your desk from the beginning of the exam until the proctor verifies your identity.
- Before you leave the classroom you must sign under your name on the photo roster available on the front desk and leave the exam on the front desk as well.
- You may **NOT** use any additional materials. In particular, you may **NOT** use calculators, textbooks or notes.
- The exam is individual. Therefore, you may **NOT** consult your colleagues during the exam.
- Your cell phones must be turned off before the exam begins.
- Please solve each subject on a separate sheet of paper.
- Answers with little or no justification will receive no credit.
- Should you have any questions during the exam, please ask. In particular, you may ask for explanations if you find a notation or a writing convention confusing.
- The last two problems on the exam, namely 6 and 7, are non-standard. To point that out they are accompanied by an exclamation mark (!).
- You may keep the exam subjects.

*"However impenetrable it seems, if you don't try it, you can never do it." (Andrew Wiles).*

*Good luck!*

<b>1</b> (6 points)	<b>2</b> (4 points)	<b>3</b> (4 points)	<b>4</b> (3 points)	<b>5</b> (3 points)	<b>6</b> (4 points)	<b>7</b> (6 points)	<b>TOTAL</b> (30 points)