

Calculus II, MAT132

Fall 2009

Midterm II

Name: _____ ID Number: _____

Put a check mark next to your recitation section in the table below:

<input checked="" type="checkbox"/>	R01	MW 6:50pm-7:45pm	Physics P127	Chaya Rosen
<input type="checkbox"/>	R02	TuTh 5:20pm-6:15pm	S B Union 226	Luca Di Cerbo
<input type="checkbox"/>	R03	MW 11:45am-12:40pm	S B Union 231	Young-Woo Nam
<input type="checkbox"/>	R04	MF 12:50pm-1:45pm	S B Union 231	Jan Gutt
<input type="checkbox"/>	R05	MF 3:50pm-4:45pm	Physics P-116	Jan Gutt
<input type="checkbox"/>	R06	TuTh 9:50am-11:10am	Physics P117	Andrew Stimpson
<input type="checkbox"/>	R07	MW 11:45am-12:40pm	S B Union 226	Andrew Candela
<input type="checkbox"/>	R08	TuTh 8:20am-9:40am	S B Union 237	Andrew Stimpson
<input type="checkbox"/>	R09	MW 3:50pm-4:45pm	S B Union 226	Chaya Rosen
<input type="checkbox"/>	R10	MF 12:50pm-1:45pm	Lgt Engr Lab 154	Andrew Candela

This is a closed book, closed notes test. No consultations with others. Calculators are not allowed.

The first page of the exam contains some useful formulas. You can use those as needed.

Please turn off and take off the desk cell phones, pagers, etc. Only the exam and pens/pencils should be on your desk. If you need extra paper, ask your proctors.

Unless the problem explicitly states otherwise, please explain all your answers and show all work. Answers without explanation will receive little credit.

The problems are *not* in the order of difficulty. You may want to look through the exam and do the easier questions first.

Each question is worth 20 points. If a question consists of several parts, the parts have equal weight.

DO NOT TURN THIS PAGE UNTIL INSTRUCTED TO DO SO

Please do not write in this table

1	2	3	4	5	Total

Reference Page

Trig Formulas

$$\sin^2 x + \cos^2 x = 1 \quad \sin^2 x = \frac{1 - \cos 2x}{2} \quad \cos^2 x = \frac{1 + \cos 2x}{2}$$

Derivatives of inverse trig functions

$$\begin{aligned}(\arcsin x)' &= (\sin^{-1} x)' = \frac{1}{\sqrt{1-x^2}} \\(\arccos x)' &= (\cos^{-1} x)' = -\frac{1}{\sqrt{1-x^2}} \\(\arctan x)' &= (\tan^{-1} x)' = \frac{1}{1+x^2}\end{aligned}$$

Integration by parts formula

$$\int uv' dx = uv - \int u'v dx$$