MATH 162 – FALL 2007 – FINAL EXAM
DECEMBER 10, 2007

STUDENT NAME——————————————————————————

STUDENT ID————————————————————————

INSTRUCTOR ——————————————————————————

RECITATION INSTRUCTOR————————————————————

RECITATION TIME——————————————————————

INSTRUCTIONS

1. Verify that you have **14 pages**.
2. The exam has 25 questions, each worth 8 points.
3. Fill in the blank spaces above.
4. Use a number 2 pencil to write on your **mark-sense sheet**.
5. **On your mark sense sheet**, write your name, your student ID number, the division and section numbers of your recitation, and fill the corresponding circles.
6. Mark the letter of your response for each question on this booklet and on the mark-sense sheet.
7. Work only on the spaces provided or on the backside of the pages.
8. **No books, notes or calculators may be used.**

SOME FORMULAS

$$\sin^2 x = \frac{1 - \cos(2x)}{2}, \quad \cos^2 x = \frac{1 + \cos(2x)}{2}, \quad 1 + \tan^2 x = \sec^2 x$$

$$\cos(\frac{\pi}{3}) = \sin(\frac{\pi}{6}) = \frac{1}{2}, \quad \cos(\frac{\pi}{6}) = \sin(\frac{\pi}{3}) = \frac{\sqrt{3}}{2}, \quad \cos(\frac{\pi}{4}) = \sin(\frac{\pi}{4}) = \frac{\sqrt{2}}{2}$$

Area of a surface of revolution about the x – axis $S = \displaystyle\int_a^b 2\pi f(x)\sqrt{1 + (f'(x))^2}\, dx$

1 C   2 C   3 B   4 B   5 B   6 A   7 D   8 D   9 D   10 E

11 B   12 C   13 D   14 A   15 D   16 B   17 B   18 A

19 D   20 A   21 B   22 E   23 D   24 D   25 B