

## The Information about the Final Exam for Math 100 and Math 180

1. The final exam for Math 100 and Math 180 will be from 12:00 noon-2:30 p.m on December 16. No calculators, books and notes are allowed.
2. The final exam for Math 100 and Math 180 has 8 questions. Question 1 consists of 14 short-answer questions, which are worth  $14 \times 3 = 42$  marks. Questions 2, 3, 4, 5, 6, 7 and 8 are longer-answer problems, which are worth 58 marks.
3. The final exam for Math 100 and Math 180 is written according to Math 100 and Math 180 syllabus. Hence, you should know all topics in Math 100 and Math 180 syllabus as posted on the course web page.
4. The final exam for Math 100 and Math 180 DOES NOT have a question asking for the use of differentials in section 3.10.
5. The following common formulas occurring in high school math courses may be needed. Students need to memorize these formulas.
  - \* The volume formula of a rectangular box:  $V = xyz$ , where  $x$ ,  $y$  and  $z$  are the dimensions of the box.
  - \* The volume formula of a right cylinder:  $V = \pi r^2 h$ , where  $r$  is the radius of the base, and  $h$  is the height of the right cylinder.
  - \* The area formula of a a circle:  $A = \pi r^2$ , where  $r$  is the radius of the circle.
  - \* The circumference formula of a circle:  $C = 2\pi r$ , where  $r$  is the radius of the circle.
  - \* The Pythagorean Theorem:  $a^2 + b^2 = c^2$ , where  $a$  and  $b$  are the sides of a right triangle, and  $c$  is the hypotenuse.
  - \* If  $ax^2 + bx + c = 0$ , then  $x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$ .

Other area/volume/distance formulas not given in the list that may be needed will be stated on the exam.