King Fahd University of Petroleum & Minerals
Department of Mathematics and Statistics
(Semester 171) Math 101-48 Quiz # 6

Name: _____ I.D. # _____ Sr. # ___

1. The height of a right circular cone is 6cm and its radius is 3cm. Find the dimensions of the right circular cylinder with the maximum volume that can be inscribed in the cone.
2. If we use Newton's method to find an approximate solution for $x - \cos x = 0$ starting with $x_1 = \pi / 2$, then what is the next approximate solution x_2?

King Fahd University of Petroleum & Minerals
Department of Mathematics and Statistics
(Semester 171) Math 101-50 Quiz # 6

Name: _____ I.D. # _____ Sr. # ___

1. The height of a right circular cone is 8cm and its radius is 4cm. Find the dimensions of the right circular cylinder with the maximum volume that can be inscribed in the cone.
2. If we use Newton's method to find an approximate solution for $x - 2\sin x = 0$ starting with $x_1 = \pi/2$, then what is the next approximate solution x_2?