

Math 2215 - Calculus 1

Homework #6 - 2005.10.13

Due Date - 2005.10.11

A drinking glass is in the shape of a truncated cone with base of radius 3 cm, top radius 5 cm, and height 10 cm. A beverage is poured into the glass at a constant rate of $48 \frac{\text{cm}^3}{\text{sec}}$. Find the rate at which the level of the beverage is rising in the glass when it is at a depth of 5 cm.