

MCS21 Homework 35

1. A conical tank is being filled with water at a rate of 2 cubic feet per minute. The radius at the top of the tank is 4 feet and the depth of the tank is 10 feet. How fast is the water level rising when the water is 5 feet deep?
2. A large cylindrical tank filled with water has a radius of 30 feet and a height of 100 feet. The water is being drained at a constant rate such that the depth of the water is decreasing at 1 foot per second. How fast is the water draining from the tank?