$Math~122\ -\ \#18$ Applications of First Order Differential Equations

1. A tank initially contains 100 gallons of water containing 40 pounds of salt. A salt solution containing 2 pound of salt per gallon is added to the tank at the rate of 3 gallons per minute, and the solution in the tank is drained off at the rate of 2 gallons per minute. How much salt is in the tank after 30 minutes?