

Cypress College Math Review:

Mixture Applications of Differential Equations

Two tanks each contain 40 gallons of a salt solution initially, with 10 pounds of salt in the first tank and 5 pounds of salt in the second tank. A salt solution containing 4 pounds of salt per gallon runs into the first tank at the rate of 2 gallons per minute. The mixture from the first tank runs into the second tank at the rate of 2 gallons per minute, and the mixture in the second tank runs out at the same rate. Find the amount of salt in each tank as a function of time.

