

Calculus Worksheet: Rate of Change (2)

A block of ice start melting at $t = 0$ where t is the time. The rate at which its mass M decreases is proportional to the cube root of the mass. If the initial (at $t = 0$) mass M is equal to 5 Kilograms and it is equal to 3 Kilograms at $t = 1$ hour, find t so that $M = 0$.