Heat of Fusion Dry Lab

Problem

1. **[2 pts]** An ice cube (temp = 0.00 °C) that has a mass of 12.00 grams is placed into a calorimeter that contains 63.00 grams of water, which starts at a temperature of 56.00 °C. What temperature will the water be once the ice has completely melted, and is mixed with the warm water?

   The specific heat of water is 4.184 J/(g °C) and the specific heat of fusion of ice is 334 J/g.

   [show your work for full credit]

°C