PreLab 9: Latent Heat of Liquid Nitrogen

1) How much thermal energy must be removed from 20 g of aluminum to lower its temperature from 300 K to 290 K? [Hint: You can assume the $c(T)$ value given in Table 1 for 300 K is valid for the temperature range 290 K $\leq T \leq$ 310 K].

2) How much thermal energy must be removed from 20 g of aluminum to lower its temperature from 300 K to 200 K? [Hint: You need to use Eq. 3 to answer this].