

# Heat Transfer Questions & Answers

## Question by Student 201527105

*I have a question about Assignment#3 Q5. When i use 'Shape Factor table', there is no case for Hollow sphere with  $r_1, r_2, r_3$ . In this case, can i use the table about Hollow sphere with  $r_i, r_o$ ?*

You should use shape factors here. Think about it more.

## Question by Student 201428239

*Professor, I have a question about Assignment 3 of Question #5 (c). I don't know the answer about (c). So I don't know if my answer is correct. I got 450K for (c). Is it correct??*

There's a reason why this is not given. Think about the problem more.

## Question by Student 201428239

*Professor, I have a question about Assignment 3 of Q5. Should I calculate T of SUN?? I already calcualted with respect to radiation H-T and I got 381.4K.... I think this is not true in r eal case. Is there anything that I missed??*

Explain to us how you can calculate the sun's temperature.

## Question by Student 201428239

*I calculated the T of sun like this.*

$$q''_{\text{sun}} = \sigma T_{\text{sun}}^4$$

*And I continued like this.*

$$q_{\text{gen}} = \sigma A (T_{\text{Bo}}^4 - T_{\text{sun}}^4)$$

*A is equal to  $4\pi r_3^2$  Is there anything that I missed?*

How can you find the temperature of the sun? I can't follow you. I see no equation  $T_{\text{sun}} = \dots$

## Question by Student 201312147

*Professor, I have a question assignment#3 Q5(a). To solve this problem, we have*

*to need  $T$  of Sun?? or can we solve to using  $q_{rad}'' = q_{gen}''$ ??*

You don't have to find  $T_{\text{sun}}$  if it's not needed to find the answer to the problem.

**Question by Student 201527136**

*Professor, I have question about assignment#5 Q1. In class, You said that power and viscous dissipation are same. But the answers of power and viscous dissipation are different. Why they are different?*

You should be able to explain this on your own.