Conduction w/ 2 layers ACT

Compare the heat flow through material 1 and 2.

A)
$$H_1 > H_2$$

B)
$$H_1 = H_2$$

C)
$$H_1 < H_2$$

• Estimate T₀ the temperature between the two

A) 5 C

B) 12.5 C

C) 20 C



Outside: $T_c = 0C$

Inside: $T_H = 25C$

$$\Delta x_1 = 0.02 \text{ m}$$
 $A_1 = 35 \text{ m}^2 \kappa_1 = 0.080 \text{ J/s-m-C}$

$$\Delta x_2 = 0.075 \text{ m}$$
 $A_2 = 35 \text{ m}^2 \kappa_2 = 0.030 \text{ J/s-m-C}$