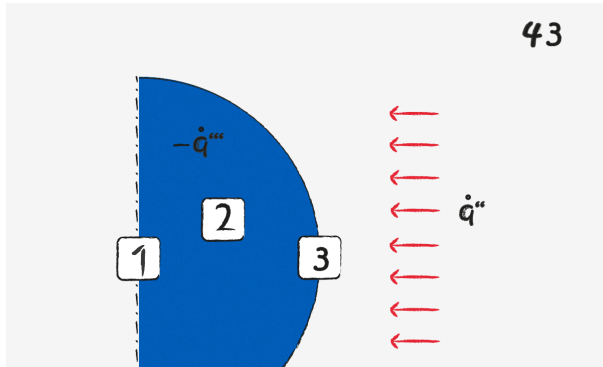# Heat Conduction: Task 43

The image describes semicircle. Consider the heat flux is in the right hand side and the heat loss is in the semicircle.

1

Due to symmetry reasons, the temperature gradient in the center is zero.

2

To meet the condition in the center, the temperature gradient is zero (left side). Due to the heat loss, the temperature gradient decreases from right to left.

3

The temperature gradient at the end of the material is increasing.