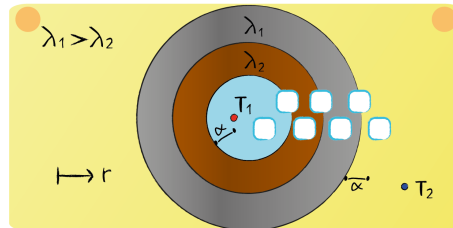
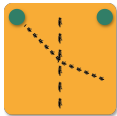


Temperature Profile 79



After getting more close towards the inner pipe wall the temperature gradient increases.



The temperature gradient for the conductive layer conduction is less steep, when transforming from convection to conduction.



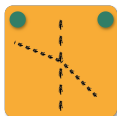
The area increases with r so the temperature gradient decreases.



$\lambda_1 > \lambda_2$ therefore is the temperature gradient bigger for the outer cylindrical wall.



The area increases with r so the temperature gradient decreases.



The temperature gradient for the conductive layer conduction is less steep, when transforming from conduction to convection.



After moving away from the outer pipe wall the temperature gradient increases until no heat is transferred.