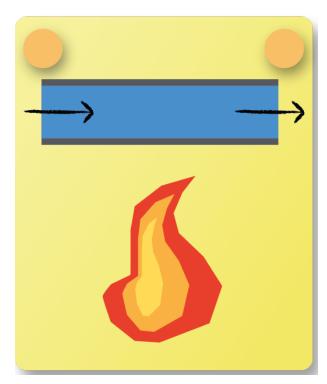


Lecture Fins Question 3



A fluid within a pipe shall be heated by a gas fired burner. On which side of the pipe are fins to be installed for an enhanced heat transfer?



While heat transfer from fluid to pipe is governed by convection, radiative heat transfer is dominant in the vicinity of the flame. Since fins are designed to enhance convective heat transfer the inner side is a reasonable placement.