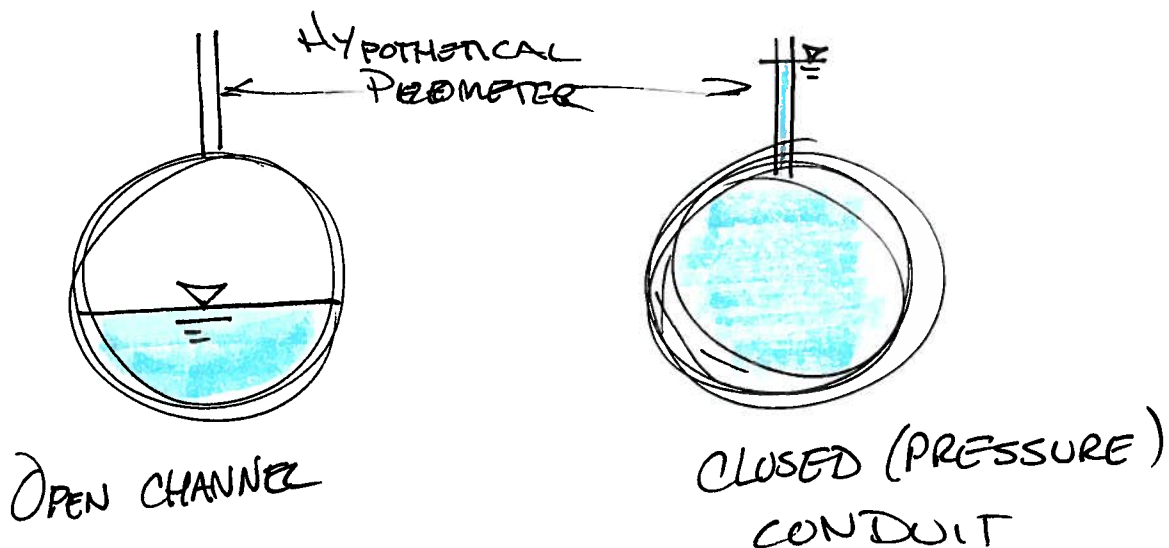


CE 3305 Fluid Mechanics  
Spring 2014 Quiz 23

1. Define an open channel.

*A conduit whose upper flow boundary is a liquid free surface*

2. Describe the conditions under which a sewer pipe behaves as an open channel and as a closed conduit. Use sketches to support your answer.



*SEWER IS OPEN CHANNEL WHEN LIQUID SURFACE BELOW TDP (CROWN; SOFFIT) OF PIPE.*

*SEWER IS CLOSED CONDUIT WHEN H.G.L IS ABOVE TDP OF PIPE (CONDITION IS CALLED SURCHARGE)*