

Name: _____

Problem Set 2

Hydrogeology (ERS 580)

Questions and activities related to the top figure:

- What is the bulk vertical and horizontal hydraulic conductivity for this cross section?
- Draw a flow line that honors the tangent law.
- Using the bulk hydraulic gradient and bulk conductivities, calculate a ground-water flow direction.
- Compare the two results.

Questions and activities related to the bottom figure:

- Draw in two flow lines that honors the tangent law.
- Calculate the discharge (per unit width) in each layer within the flow tube defined by these flow lines.

