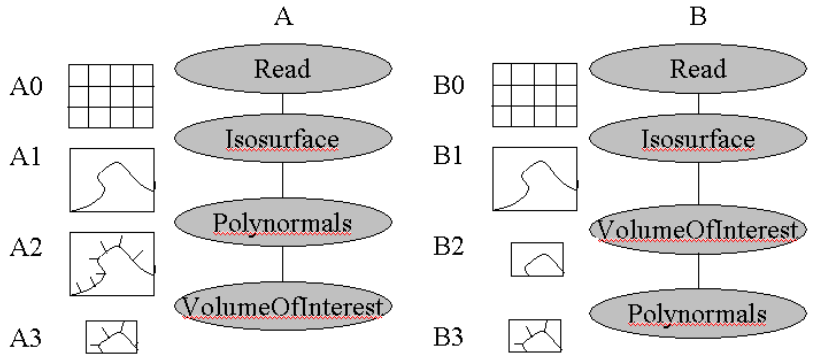
Study Questions 6

Q1) When working with Vistrails, you are actually manipulating at least two forms of data. What are they?

Q2) Consider these two VisTrails, A and B.



"Isosurface" computes the surface (or line in this 2D case on which every point has the same value (like a contour map). that represents a constant value.

"Polynormals" computes the normal vector for each polygon (or line segment in this 2D case.)

"VolumeOfInterest" finds a specific subset of the dataset.

Assuming we executed A and then executed B, and further assuming that all these modules are "cacheable," which intermediate result in B would be read from the cache? (B0, B1, B2, or B3?)

A and B seem to produce the same result. Would it be feasible to design a "smart" cache that understood that A3=B3? What sort of knowledge would the system have to have?

Q3) The "spreadsheet" metaphor used in the Vistrails system allows uses to inspect visualizations based on multiple parameter values simultaneously, side by side. Assume we want to inspect the effects of multiple parameter values in quick succession, that is, make an animation. Is there any reason why it might be difficult to implement an animation feature?