1. The figure below shows geopotential height (solid) and temperature (dashed) at 800 hPa. Use a hand analysis to draw Q-vectors at the indicated points on the figure below.

2. After the Q-vectors are analyzed, label regions of convergence and divergence of the Q-vector.

3. Do the areas of convergence and divergence of the Q-vector that you have labeled correspond well with your knowledge of where you would normally expect rising and sinking motion in a cyclone? Explain.