

1. Let ϕ_1 and ϕ_3 be the graph coordinate charts on the sphere described in class. Compute the domain, range, and action of the transition function $\phi_3 \circ \phi_1^{-1}$.
2. Text: 1.6
3. Text: 1.7 (Be sure to derive the formula for the inverse of stereographic projection.)
4. Text: 1.8
5. Text: 1.9
6. Text: 1.13