Topology if the Complex Plane

Reading

Section 1.4, part II

Problems

Practice problems:

Topics to know

1. Open disc of radius r around a point.
2. Notion of open set.
3. The open disc is an open set.
4. Notion of a closed set.
5. Interpretation of closed sets as containing the limits of their convergent sequences.
6. The closed disc is a closed set.
7. Boundary of a set.
8. Closed and bounded sets are called compact.
9. Connected sets, polygonally-connected sets.
10. Every polygonally-connected set is connected. The converse is false.
11. Open and connected sets are called regions. Regions are polygonally-connected.