MATH 555: VIRTUAL WEEK ASSIGNMENT

TRIANGULATED MANIFOLDS AND GEOMETRIC MANIFOLDS

For full credit on this assignment, please complete the following steps:
(1) Read sections 1.4 and 1.5 in the book.
(2) Log onto beachboard and post a solution to your assigned problem by midnight on Tuesday Feb. 14th. For full credit your solution should be complete or, at a minimum, a solid attempt. You may attach pictures of your solutions to your post if this is a more appropriate method of communicating your solution.
(3) Be ready to address the feedback you receive and post revisions of your solution if necessary. Revisions that I request should be completed by midnight on Saturday Feb. 18th.
(4) Make at least one substantive comment on one of your classmates solutions by midnight on Saturday Feb. 18th.

Problems.
(1) Page 21 Exercise 1
(2) Page 21 Exercise 2
(3) Page 21 Exercise 3
(4) Page 21 Exercise 4
(5) Page 21 Exercise 5
(6) Page 21 Exercise 6
(7) Page 21 Exercise 7
(8) Page 22 Exercise 1
(9) Page 22 Exercise 3
(10) Find the formula for the Euler Characteristic of $[0,1]^n = \times_{i=1}^{n}[0,1]$. Justify your answer.
(11) Find the formula for the Euler Characteristic of $T^n = \times_{i=1}^{n}S^1$. Justify your answer.
(12) Find the formula for the Euler Characteristic of S^n. Justify your answer.