

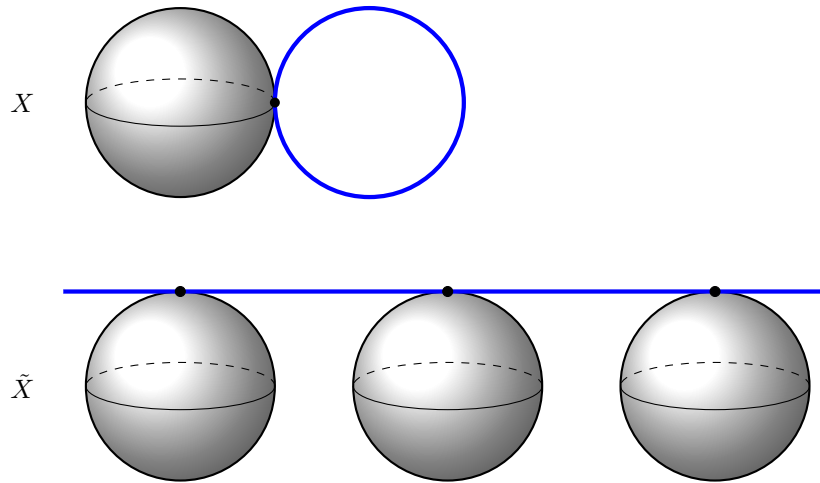
# MAT598 - Additional Problem Set 05

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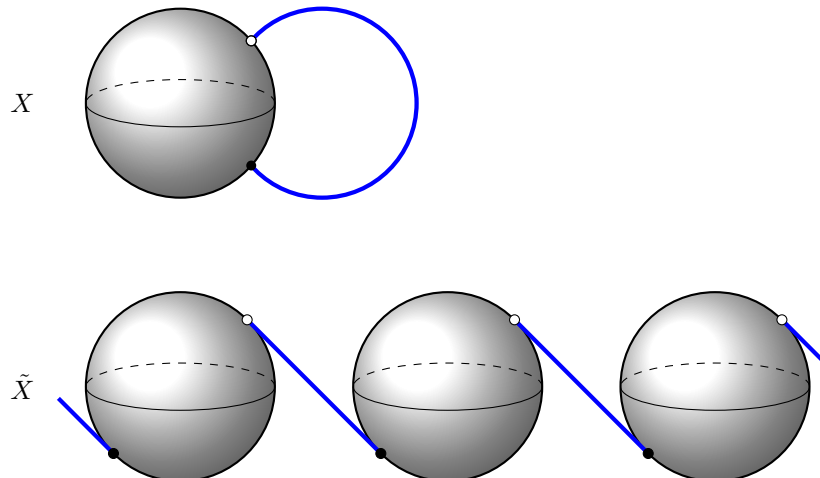
Fall 2015

Solutions will be posted as they are submitted to me.

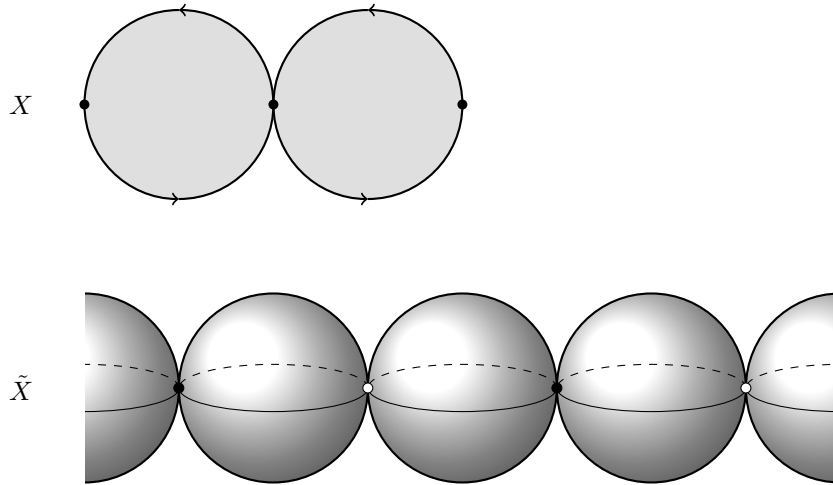
1. *INCOMPLETE*
2. *INCOMPLETE*
3. *INCOMPLETE*
4. *INCOMPLETE*
5. *INCOMPLETE*
6. *INCOMPLETE*
7. *INCOMPLETE*
  - a.  $X = S^1 \vee S^2$



- b. The union of  $S^2$  and an arc joining two distinct points of  $S^2$ .

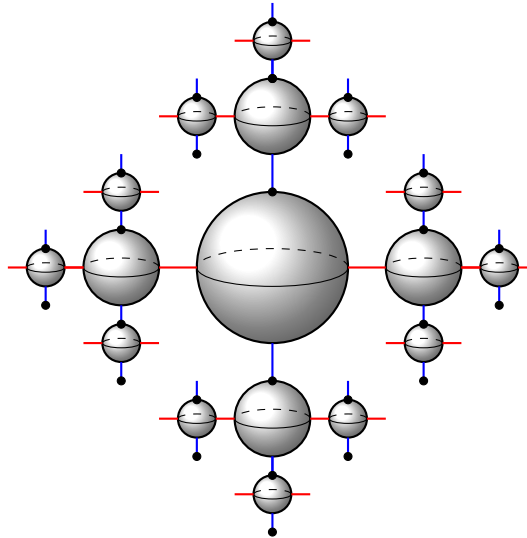


c.  $\mathbb{RP}^2 \vee \mathbb{RP}^2$



d. *INCOMPLETE*

e.  $S^2$  with two arcs joining two distinct pairs of points. *INCOMPLETE*



f. *INCOMPLETE*

g. *INCOMPLETE*

h.  $S^1 \vee T^2$  where  $T^2$  is the torus.

