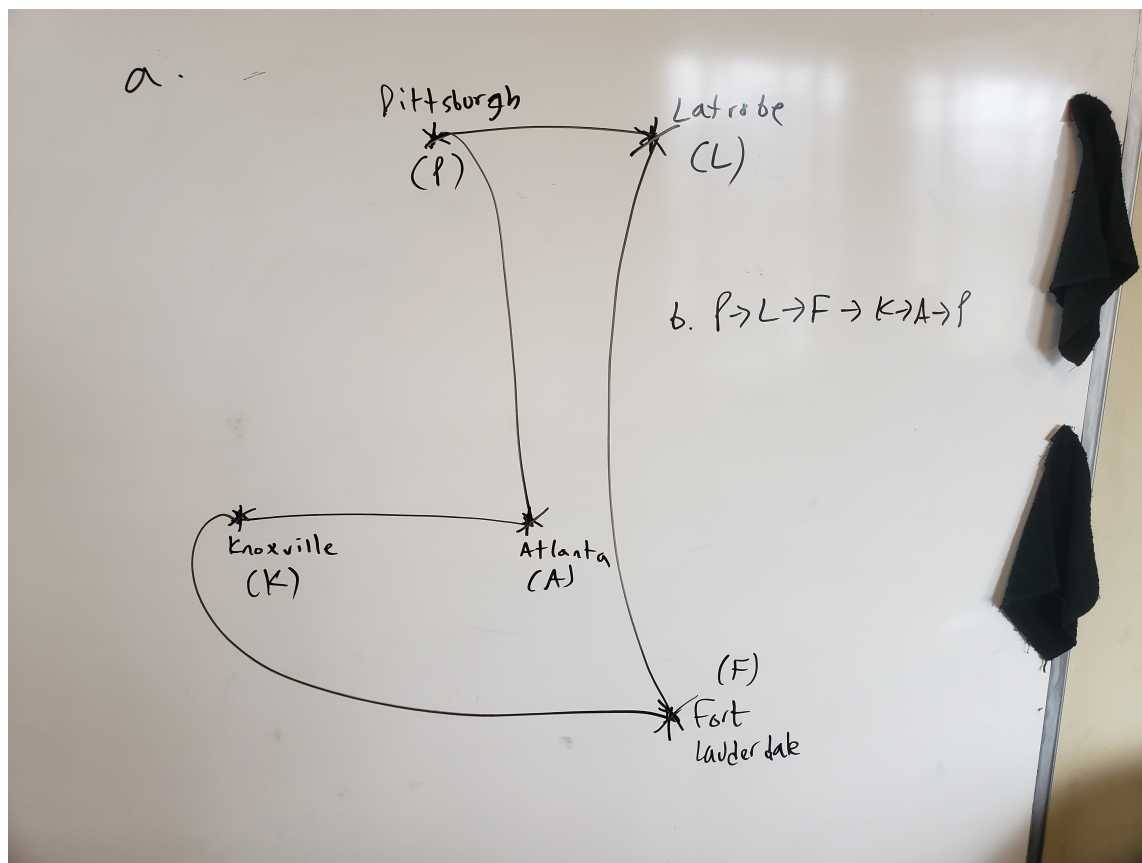


MATH 113 SPRING 2023 SHAPE REVIEW DAY PROBLEMS KEY

- 0.1. **Problem 1.** N/A
- 0.2. **Problem 2.** $A = 57$ $B = 70$ $C = 53$ $D = 57$ $E = 70$
- 0.3. **Problem 3.** Yes, both values will be 6
- 0.4. **Problem 4.** a. 600π square feet
b. 2000π cubic feet
- 0.5. **Problem 5.** 7.5 percent
- 0.6. **Problem 6.** $E = 25$



- 0.7. **Problem 7.**
There are other solutions for part b as well.

0.8. **Problem 8.** Answers will vary

0.9. **Problem 9.** Answers will vary

0.10. **Problem 10.** The table should have the following contents:

- Intrinsic curvature is where parallel lines on a flat surface are no longer parallel, and triangles may have interior angles summing to something besides 180 degrees; extrinsic curvature does not cause these things to happen
- Positive curvature occurs when both ends of the surface curve in the same direction (up or down); negative curvature occurs when the two directions of the surface curve in opposite directions; zero curvature occurs when the surface is flat in one direction

0.11. **Problem 11.** Answers will vary based on measurements