

CALCULATING DISTANCE

Use your copy of the school map, protractor, straightedge, and knowledge of the Law of Cosines and Law of Sines to determine the distances between different rooms around the school. For this assignment, use direct paths (straight lines) without following the physical hallways. As you find the distance between rooms, find the distance between the centers of the rooms, unless otherwise instructed. For example, if asked to find the distance between the cafeteria and the main office, then you need to find the distance between the center of the cafeteria and the center of the main office.

- 1) Draw a line against the far east wall of the auditorium. That distance is defined as 120 ft.
- 2) Construct a triangle connecting both end points of the far east wall segment of the auditorium to the center of the main office.
- 3) What is the distance from the southeast corner of the auditorium to the center of the main office?

- 4) What is the distance from the southeast corner of the auditorium to the center of room 201?

- 5) What is the distance from the main office to room 201?

- 6) What is the distance from room 201 to the gym?

- 7) What is the distance from the gym and the main office?

- 8) What is the distance from the gym to the library?

- 9) What is the distance from the library to the main office?