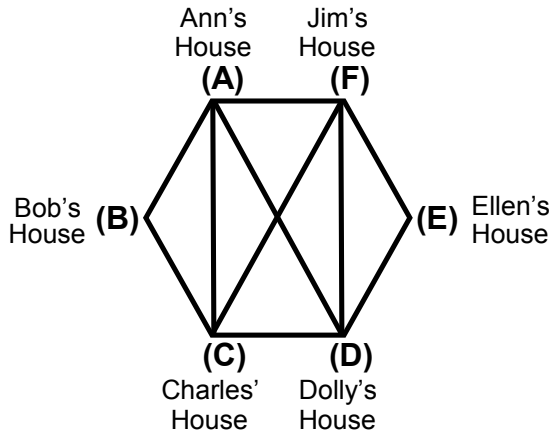


Vertex-Edge Homework Problems

Directions: Use the Vertex-Edge graph below to answer question 1.



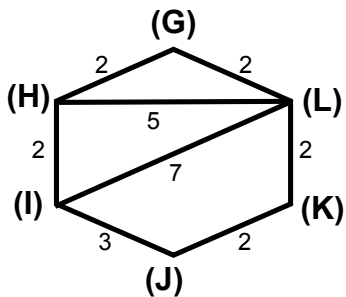
NOTE:

Use the letters on the vertices of graphs to show your paths.

Example: C > B > A means that the path goes from C to B to A

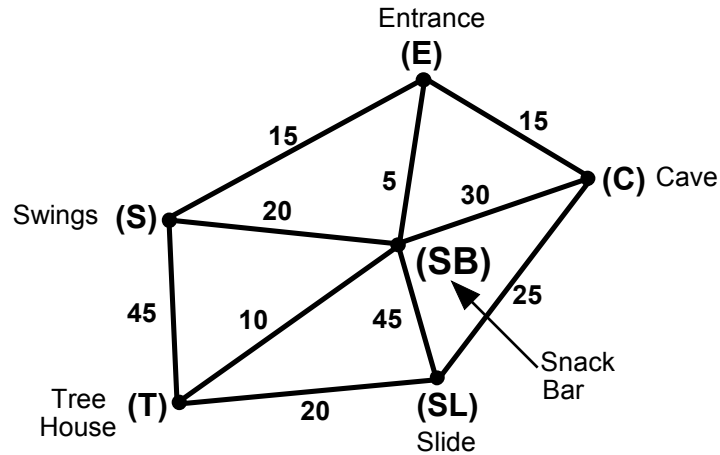
1. List two paths from Charles' house (C) to Ellen's house (E)? Path 1 _____
 Path 2 _____

Directions: Use the distances (Miles) on the Vertex-Edge graph below to answer questions 2 and 3.



2. List two circuits that touch all of the vertices? **Circuit 1** _____
Circuit 2 _____
3. What is the shortest path from point H to point K? _____

Directions: The weighted Vertex-Edge graph below shows paths and the distances (in yards) between different attractions in a park. Use this information to answers questions 4 through 5.

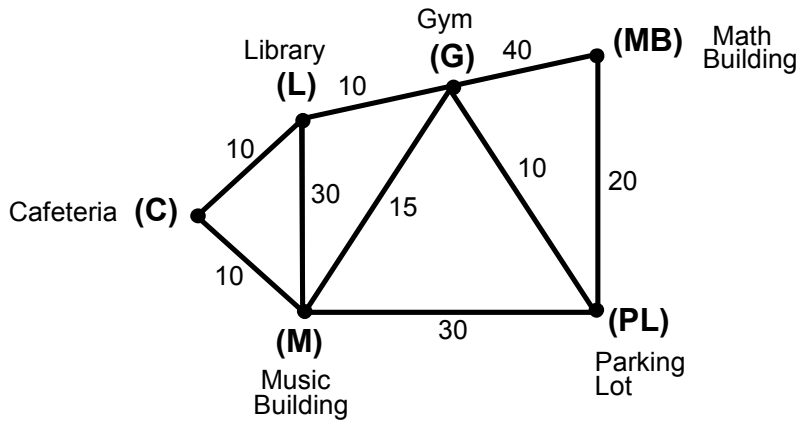


4. What is the shortest distance from the Entrance (E) to the Slide (SL)? _____

5. What is the shortest path from the Swings (S) to the Cave (C)? _____

Directions: Use the information below to answer problem 6 and 7.

The vertex-edge graph below shows the time (in minutes) that it takes to travel paths between these buildings at School.

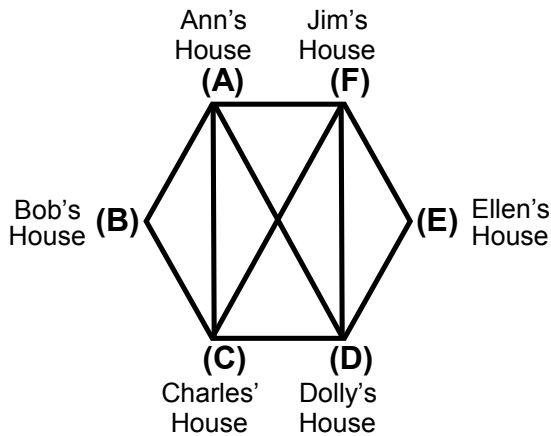


6. What is the fastest path from the Music Building (M) to the Math Building (MB)? _____

7. What is the fastest path from the Parking Lot (PL) to the Cafeteria (C)? _____

- a. Parking lot → Music Building → Cafeteria
- b. Parking lot → Gym → Library → Cafeteria
- c. Parking lot → Math Building → Gym → Library → Cafeteria
- d. Parking lot → Gym → Music Building → Cafeteria

Directions: Use the Vertex-Edge graph below to answer question 8.

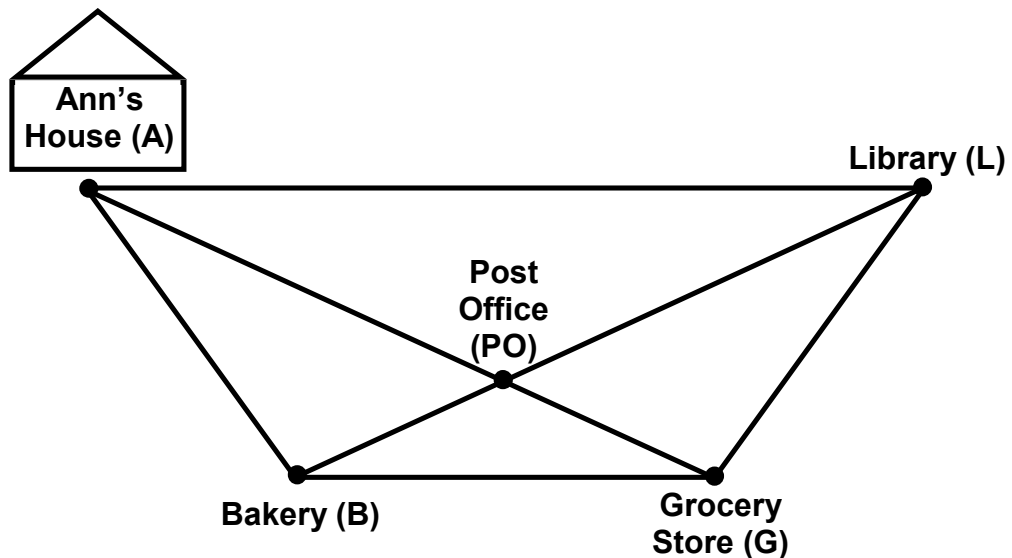


8. Which is not a path from Ann's house to Dolly's house ? _____

- a. Ann's House → Bob's House → Charles' House → Jim's House → Dolly's House
- b. Ann's House → Charles' House → Jim's House → Dolly's House
- c. Ann's House → Dolly's House
- d. Ann's House → Ellen's House → Dolly's House

Directions: Use the Vertex-Edge graph below to answer question 9.

9. Ann is going to run some errands. She wants to visit all 4 of the places shown on the map but only once. She then wants to return home. What is a path she can use to run her errands? Use the letters to show the path Ann takes to run her errands and return home.



Directions: Use the information below to answer problem 10.

10. The vertex-edge graph below shows the paths and times (in minutes)between these places in the enchanted forest.

What is the fastest time to get from the Castle (C) to the Magic Tree (MT)?

