

Grade 11 CST Math Graph Theory Assessment

The goal of this assignment is for you to demonstrate your knowledge of concepts in graph theory.

You may complete this assessment alone or in pairs.

Topic

- 1) Research an application of graph theory
 - Examples include: GPS, social media, sudoku puzzle solving, epidemiology, linguistics, pain processing, delivery route planning , other?
 - You must choose your topic and tell Dr. James. There is a maximum of 3 groups per topic.

Poster Creation

Create a poster for your topic. Your poster must include:

- A description of your topic
- A description of the way key graph theory concepts are used in your topic
 - You must include: Vertex, Edge, Path, Circuit,
 - Also include all of the following that apply to your topic: Weighted Edges, Directed Edges, Optimal Paths, Optimal Trees, Euler Paths/Circuits, Hamiltonian Paths/Circuits, Critical Path, Chromatic Number
- Biographic information on at least 2 people who were important in the development of your topic
 - Who they are, when they were born/died, where they studied, how they contributed to your topic

Note: You must present a draft of your work and poster design **on plain paper** to Dr. James before creating your final poster.

Presentation

You will present your poster to your peers and teacher (in small group settings). You must be able to answer questions about your chosen topic and its connections to graph theory