

Last name _____

First name _____

LARSON—MATH 356—CLASSROOM WORKSHEET 02
Introduction.

Concepts & Notation

- Sec. 1.1: vertices, ν , edges, ϵ , graph, adjacent, incident, neighbors.
- Sec. 1.2: identical graphs, isomorphic graphs, $G \cong H$, complete graphs, K_n , empty graph, bipartite graph, complete bipartite graph $K_{m,n}$.
- Sec. 1.3: incidence matrix \mathbb{M} , adjacency matrix \mathbb{A} .

Reminders

1. Remember to email your Notes/Classroom Worksheet prior to the next class.
2. Read ahead in our textbook.

Review

1. What are graphs, and what can they be used for?
2. What is the history of graph theory, what are its origins?
3. What is the definition of a *graph*?
4. What is a *drawing* of a graph? (The drawing is not unique!)
5. What are *incident*? What are *adjacent*?
6. What is our vocabulary and notation for the number of vertices? What is our vocabulary and notation for the number of edges?
7. What is a *planar graph*?

Notes

1. What are *identical graphs*?
2. What are *isomorphic graphs*?
3. What are *complete graphs*?
4. What is an *empty graph*?
5. What is a *bipartite graph*?
6. What is a *complete bipartite graph*?
7. What is an *incidence matrix* \mathbb{M} of a graph? (these are not unique!)
8. What is an *adjacency matrix* \mathbb{A} of a graph? (these are not unique!)