

## Outline Section 9.4 Lagrange Multipliers

Explain in your own words the ideas in Section 9.4

You are free to choose the form of notes that suites you best.  
e.g., mind map, traditional hierarchal outline, definition/theorem.

### Questions to address:

1. When do we need to Lagrange Multipliers?
2. How is  $F(x, y, \lambda)$  defined?
3. What condition yields a relative max/min for  $f(x, y)$  ?
4. How is the technique useful in real life?

**Grading:** outline will count as a **quiz** grade based on whether your outline is

- Complete: identifies and defines the key concepts? fully addresses the questions above?
- Accurate: correct examples, explanations, and definitions?
- Clear: are they easy to follow?

**Due:** before class Thursday 3/12