Optimization

Reading

Sections 15.7

Problems

- Practice Problems 15.7: 1, 2, 3, 5, 9, 19, 21, 35, 47
- Problems to turn in 15.7: 4, 6, 10, 36, 46
- Optional: 50

Topics to know

1. Definition of local extrema
2. Critical points and Fermat's theorem
3. Second derivative test
4. Illustration for $x^2 + y^2$, $x^2 - y^2$, xy
5. Comparison of special cases to second derivative test
6. Global maxima, boundary