

## Math 10A Homework Assignment (05/02 – 05/06)

Assignment will be collected on 05/20 the Friday after next Friday during the class.

### Key notions introduced this week:

- (1) Taylor Theorem for several variables;
- (2) Second order Taylor series;
- (3) Critical points and extremal points;
- (4) Second derivative test;
- (4) Determinant of second derivatives and extrema;
- (5) Absolute extrema;
- (8) Constrained extrema and Lagrange multipliers.

### Homework problems:

§3.3. 2, 8, 16, 22, 24.

§3.4. 2, 4, 5, 12, 16, 28.