## MTH 30 LECTURE NOTES (Ojakian)

## **Topic 5: Transformation of Functions**

## OUTLINE

(References: 1.5)

- 1. Basic Function Shapes
- 2. Transforming Functions
- 1. <u>Basic Function Shapes</u> See Table 13 on pages 26, 27, 28 (in Section 1.1) Also put exponential function.

## 2. Graph Transformations

Type 1 Problem: From equation graph it. Type 2 Problem: From the graph, find the equation. Issue: One transformation, or more than one transformation ...

- (a) <u>Vertical Shift</u>
- (b) Horizontal Shift
- (c) Vertical Stretch/Compression
- (d) Horizontal Stretch/Compression
- (e) Reflection: Across y axis
- (f) Reflection: Across x axis