MTH 30 LECTURE NOTES (Ojakian)

Topic 4: Function Composition

OUTLINE

(References: 1.4)

1. Arithmetic operations, etc on functions

2. Function Composition

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1. <u>Four Arithmetic Operations</u>

   (a) Add and subtract

   (b) Multiply and divide

   (c) Can do anything!

   (d) Problems

       i. 1.4: 7

       ii. Make up a table for f and g, then compute

2. <u>Function Composition</u>

   (a) Do f then g: 2 notations - $g(f(x))$ or $g \circ f$

   (b) Problem: Do on last table (note issues of finding domain)

   (c) Problem: Student's draw 2 graphs then find compositions (note issue of finding domain)

   (d) Probelm: 1.4: 13 (and do if lose +3)

   (e) Interpretation 1.4 - examples 3, 4

3. <u>Domain With Function Composition</u>

   (a) Problem 1.4 - 21

   (b) Problem 1.4 - 27, 34