

## MTH 28.5 LECTURE NOTES (Ojakian)

### Topic 16: Multiplying Polynomials

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#### OUTLINE

References: 5.3

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#### 1. Multiplying Monomials

Recall examples already done.

#### 2. Distributivity

(a)  $A(B + C) = AB + AC$

(b)  $(B + C)A = AB + AC$

#### 3. Binomial times Binomial

(a) Use Repeated Distributivity

(b) Use FOIL acronym

(c) Vertical Method

(d) Be careful with squaring!

(e) Multiplying Conjugate Pairs yields Difference of Squares:  $(A + B)(A - B) = \dots$

#### 4. Polynomial times Polynomial

In general NOT FOIL, but Vertical Method is good.