

## Math 10: Unit 3.2: Multiplying polynomials

A) How to do it?

-many methods, but are all quite similar to each other.

i) Distributive method:

ii) F  
O  
I  
L

-FOIL implies it only works for binomial x binomial....it is just distributive for binomial multiplication. For larger polynomials, use distributive method.

iii) Vertical Method:

iv) rectangle method:

B) Watch out for questions like:

$$(x+3)^2=$$

$$(x-3)^2=$$

$$(x+3)(x-3)=$$

C) In general.

$$(x+y)^2=$$

$$(x-y)^2=$$

$$(x-y)(x+y)=$$

-do pg 128 #1-6 first column