I. Factoring Checklist (p.417):

1. Common factor?

use the distributive property, $a\boldsymbol{x} \pm a\boldsymbol{y} = a(\boldsymbol{x} \pm \boldsymbol{y})$

2. Binomial?

Difference of 2 squares, $a^2 - b^2 = (\_\_+\_\_)(\_\_-\_\_)$

Sum of 2 squares, $a^2 + b^2$ is prime (*i.e.*, not __________)

Sum or difference of 2 cubes,

$a^3 \pm b^3 = (a \pm b)(a^2 \mp ab + b^2)$

3. Trinomial?

i. $\boldsymbol{x}^2 + b\boldsymbol{x} + c = (\boldsymbol{x} + m)(\boldsymbol{x} + n)$

m & n are factors of “c” whose sum is “b”

ii. $a\boldsymbol{x}^2 + b\boldsymbol{x} + c = (p\boldsymbol{x} + m)(r\boldsymbol{x} + n)$

reverse the FOIL method...

factor “a” & “c” to obtain **F**irst & **L**ast products

then check the middle term b = **O**utside + **I**nside

I. Factoring Checklist (*continued*):

4. Four (or more) terms

use group factoring, not covered (6.1/p.388)

II. Examples (p.420): Problems #2,6,**16**,20,32,38

III. More Examples (pp.420-421): Problems #14,26, 48,58,72,74

HW: pp.420-421 / Problems #1,3,5,7,11,13,19,25, 31,35,37,39,47,53, 57,61,69,71,73

Read pp.423-427 (section 6.6)