

Class #9 - Tues Sept. 21

Last Fri (and yest in office hrs):

- 3×3 linear systems

WW: due Friday!

" 3×3 " #4: will be counted
as extra credit!

notes
will be
posted
late
today!

Blackboard
recordings!

Office hrs: Tomorrow (Wed)
12:30p - 1:30p

Factoring by "grouping"

WW: "GCF-Grouping", #5

$$\text{Factor: } [2x(y+1)] - [5(y+1)]$$

} common factor of $(y+1)$

$$\begin{aligned} &= (y+1) \cdot [2x - 5] \\ &= (2x - 5)(y+1) \end{aligned}$$

(same concept/
technique:
factoring at
a common
factor)

$$\#6) \underbrace{(16AB + 28A)}_{\text{GCF: } 4A} + \underbrace{(20B + 35)}_{\text{GCF: } 5}$$

$$\begin{aligned} &= \underline{4A} \cdot (\underline{4B+7}) + \underline{5} (\underline{4B+7}) \\ &= (4B+7)(4A+5) \end{aligned}$$

check: By "FOIL"

next topic : factoring "quadratic polynomials"

Examples : $x^2 + x + 2$

General form of a quadratic polynomial :

$$\underline{a}x^2 + \underline{b}x + \underline{c} \quad (\text{where } a, b, c \text{ are constant coefficients})$$

Later in the semester,
we will look at graphs
 $y = ax^2 + bx + c$

For now, we're just going to focus on quadratic polynomials on their own (i.e., as "algebraic expressions" ... not yet in number equations)