

**Kerry Ojakian's MTH 28.5 Class
Class Assignment #19**

Factor out the GCF.

1. $20A + 30yA =$

4. $9(y - 1) - 5x(y - 1) =$

2. $30xA - 5A =$

5. $x^2(x^2 + 4) - 4(x^2 + 4) =$

3. $x(x + 1) - 5(x + 1) =$

6. $x^2(x^2 + 4) - 4(x^2 + 4) =$

“Shift the negatives”.

7. $2(-x + 4) = -2(x - 4)$ (example)

10. $(-x - 5)7 =$

8. $3(-y + 7) =$

11. $(u^2 - 7)(-34y) =$

9. $-3y(-y + 7) =$

12. $3x(-y + 7) =$

Factor by Grouping.

13. $cd + 6c + 4d + 24 =$

14. $6y^2 + 7y + 24y + 28 =$

15. $x^2 - x + 4x - 4 =$

16. $9p^2 + 12p - 15p - 20 =$

17. $mn - 6m - 4n + 24 =$

18. $x^3 + x^2 + x + 1 =$

19. $5x^3 - 3x^2 + 5x - 3 =$

20. $3x^2 - x + 6xy - 2y =$

Factor by choosing to either factor out GCF or use difference of squares.

$$21. \ x^2 + 9x =$$

$$22. \ x^2 - 9 =$$

$$23. \ x^2 - 36 =$$

$$24. \ 15x^4 - 20x^2 =$$

$$25. \ 9x^2 - 1 =$$

$$26. \ 9x^2 - 4y^2 =$$

$$27. \ 4x^4y^3 - 8x^2y + 4xy =$$

$$28. \ 9 - 25x^2 =$$

$$29. \ 5x^4 - 15x^3 + 25x^2 =$$

$$30. \ 64x^2 - 49y^2 =$$

$$31. \ 12x^4y^3 - 18x^3y^2 - 6x^4y^6 =$$

$$32. \ 12x^4y^3z - 18x^3y^2z^3 - 9x^4z^2 =$$