

Factoring Puzzle GCF, DOTS, SOTS, DOTC, SOTC, Trinomial Mr. Pleacher Name: _____

Factor completely. Then find the letter which matches.

- | | |
|----------------------------------|---|
| _____ 1. $2x^2 + 8x + 6$ | A. None of the answers below |
| _____ 2. $8x^3 - 1$ | B. $x(x^2 + 1)(x - 1)(x + 1)$ |
| _____ 3. $x^3 + 27$ | C. $(x - 3)(x^2 - 3x + 9)$ |
| _____ 4. $(x + 5)x^2 - 9(x + 5)$ | E. It is prime. |
| _____ 5. $x^5 - x$ | H. $(x + 5)(x + 3)(x + 3)$ |
| _____ 6. $5x^2 - 20$ | L. $2x^2(4x - y + 6w)$ |
| _____ 7. $8x^3 - 2x^2y + 12x^2w$ | N. $7x(x - 3)(x + 3)$ |
| _____ 8. $3x^2 - x - 10$ | O. $5(x - 2)(x + 2)$ |
| _____ 9. $x^4 - 25$ | O. $(x - 1)(x + 1)(x^2 - x + 1)(x^2 + x + 1)$ |
| _____ 10. $x^6 - 1$ | R. $(x^2 + 5)(x^2 - 5)$ |
| _____ 11. $5x^3 - 40$ | R. $(2x - 1)(4x^2 + 2x + 1)$ |
| _____ 12. $81x^2 + 64$ | S. $(x - 3)(x + 3)^2$ |
| _____ 13. $7x^3 - 63x$ | T. $2(x + 3)(x + 1)$ |
| _____ 14. $3x^2 - 1$ | U. $(x - 2)(3x - 5)$ |
| _____ 15. $x^3 + 3x^2 - 9x - 27$ | V. $5(x - 2)(x^2 + 2x + 4)$ |
| | Y. $(x + 3)(x^2 - 3x + 9)$ |

Unscramble the letters to the *first* ten answers to get the first word below and unscramble the last *five* letters to get the second word. Can you DECODE the message?

THIS IS A _____.

PRACTICE THE FIRST FIVE LETTERS, NOT THE LAST _____.