

Factoring Polynomials
Emphasis on Factoring Trinomials using U-Substitution

Completely factor each of the following using U-Substitution:

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|------------------------|-----------------------|
| 1. $x^4 - 9x^2 + 20$ | 2. $t^4 - 7t^2 + 12$ |
| 3. $x^4 + x^2 - 12$ | 4. $x^4 - 7x^2 - 18$ |
| 5. $2w^4 - 9w^2 + 4$ | 6. $3x^4 - 5x^2 + 2$ |
| 7. $x^4 - 4x^2 + 4$ | 8. $y^4 - 6y^2 + 9$ |
| 9. $3x^4 + 16x^2 - 12$ | 10. $2x^4 + 9x^2 - 5$ |

| | |
|---------------------------|-------------------------|
| 11. $2z^4 + 4z^2 - 70$ | 12. $3y^4 + 10y^2 - 8$ |
| 13. $4t^4 - 20t^2$ | 14. $r^4 - 81$ |
| 15. $x^4 - x^2 - 12$ | 16. $w^4 + w^2 - 12$ |
| 17. $2y^4 + y^2 - 15$ | 18. $4x^4 - 5x^2 - 9$ |
| 19. $b - 20\sqrt{b} + 64$ | 20. $z - 6\sqrt{z} + 8$ |