

enVision Algebra 1
Unit 7 part 2 Review

Name _____

Per _____ Date _____

1. Identify the greatest common factor of the polynomial: $18x^2y - 24xy^3 + 6x^5$ GCF = _____

2. Factor out the greatest common factor: $7x^2 - 4x^3 + 20$

[A] $x^2(7-4x)+20$ [B] $4x(x-x^2+5)$ [C] $7x^2-4(x^3-5)$ [D] The expression is already fully factored

3. Factor: $a^2 - 3a + ab - 3b$

[A] $(a-3)(a+b)$ [B] $(a+3)(a+b)$ [C] $(a+3)(a-b)$ [D] The expression is already fully factored

4. Factor: $x^2 - 9x + 18$

[A] The expression is already fully factored [B] $(x+6)(x+3)$ [C] $(x-6)(x-3)$ [D] $x(x-9)+18$

5. Factor: $x^2 + 5xy - 24y^2$

[A] $(x-8y)(x+3y)$ [B] The expression is already fully factored

[C] $x(x+5y)+y(5x-24y)$ [D] $(x+8y)(x-3y)$

6. Factor: $6n^2 + 15n - 36$

[A] $(3n-12)(2n+3)$ [B] $3(n+4)(2n-3)$ [C] $3(n-4)(2n+3)$ [D] $3(2n+4)(n-3)$

7. Factor: $9x^2 - 30x + 25$

[A] $(3x-5)(3x+5)$ [B] $(3x-5)^2$ [C] $(3x+5)^2$ [D] The expression is already fully factored

8. Factor: $16y^2 - 49$

[A] $(4y+7)(4y-7)$ [B] $(4y-7)^2$ [C] $(4y+7)^2$ [D] The expression is already fully factored.

9. What is the greatest common factor of: $-24n^4 + 16n^2 - 8n$ _____

10. What pair of factors -30 has a sum of 7? _____ and _____

Factor each expression completely. Circle your final answer.

11. $7x^4 - 21x^3 + 14x^2$

12. $y^3 + 5y^2 + 4xy + 20x$

13. $x^2 - 8x + 10$

14. $y^2 - 14y + 49$

15. $12x^2 + 17x + 6$

16. $y^2 - 64$

17. $n^2 - 4n - 21$

18. $3y^2 - 12$