

FACTORIZING REVIEW
ALGEBRA
I

1. $18x^4y^5 + 36x^3y^7 = 18x^3y^5(x + 2y^2)$

2. $4x^5 - 8x^4 - 4x^3 = 4x^3(x^2 - 2x - 1)$

3. $x^2 + 9x + 20 = (x+4)(x+5)$

4. $-x^2 - 4x + 21 = -1(x^2 + 4x - 21) = -(x+7)(x-3)$

5. $3x^2 - 3x - 90 = 3(x^2 + x - 30) = 3(x+6)(x-5)$

6. $15x^2 + 14x - 8 = (5x-2)(3x+4)$

7. $24x^2y + 34xy + 12y = 2y(12x^2 + 17x + 6) = 2y(4x+3)(3x+2)$

8. $xy + 2y + 3x + 6 = y(x+2) + 3(x+2) = (x+2)(y+3)$

9. $24x^3 - 6x^2 + 8x - 2 = 6x^2(4x-1) + 2(4x-1) = 2(4x-1)(3x+1)$

10. $9x^3 + 36x^2 - 4x - 16 = 9x^2(x+4) - 4(x+4) = (9x^2-4)(x+4) = (3x-2)(3x+2)(x+4)$

11. $x^2 - 36 = (x+6)(x-6)$

12. $4x^2 - 81 = (2x-9)(2x+9)$

13. $18x^2 - 98y^2 = 2(9x^2 - 49y^2) = 2(3x+7y)(3x-7y)$