

Algebra 1
Practice Quiz 8.1-8.3

NAME _____

Factor the Monomial completely. (1 Point)

1. $24x^3y$

2. $120x^3y^2$

Find the GCF of each set of monomials. (2 Points)

3. $32x^2y^4, 48x^5y$

4. $16x^2y^6, 64x^3y^3$

1. _____

2. _____

3. _____

**Factor each polynomial. Remember to use the factor methods in order:
GCF, Grouping, General Trinomial. (3 Points)**

5. $5x^2 - 15$

6. $x^2 + 7x + 10$

5. _____

6. _____

7. _____

7. $x^2 - x - 20$

8. $3x^2 - 9x + 4x - 12$

8. _____

9. _____

10. _____

9. $x^2 - 11x + 28$

10. $4x^3 - 12x^2 + 16x$

11. _____

12. _____

11. $4x^2 + 12x + 7x + 21$

12. $x^2 + 5x - 24$

Points (30) _____

**Factor each polynomial. Remember to use the factor methods in order:
GCF, Grouping, General Trinomial. (3 Points)**

13. $6x^4 + 9x^2$

14. $x^2 - 18x + 32$

15. $x^2 + 5x - 36$

16. $x^2 + 11x + 30$

13. _____

14. _____

15. _____

17. $15x^2y^5 - 18x^4y^2$

18. $8x^2 - 12x + 6x - 9$

16. _____

17. _____

18. _____

Solve each equation. Check your solutions. (3 Points)

19. $(x + 2)(x - 6) = 0$

20. $x(x + 4) = 0$

19. _____

20. _____

21. _____

22. _____

23. _____

21. $3x^2 - 6x = 0$

22. $6x^2 = 18x$

24. _____

23. $x^2 + 2x - 24 = 0$

24. $x^2 - 11x = -18$

Points (36) _____