

Algebra IIA
Factoring by GCF

Name _____

Review the distributive property to get us warmed up.

1. $2(x - 6)$

2. $4(x^2 - 7x)$

3. $-6(3x^3 - 2xy)$

4. $5x(3x - 1)$

Factoring out a common factor is the reverse of the distributive property. Factor completely!

5. $3y + 12$

6. $5x - 35$

7. $14y + 42$

8. $6a + 3$

9. $7a - 7b$

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

11. $5y^2 - 9y$

12. $9x^2 + 3x$

13. $x^3 - x^2$

14. $24x + 48y$

15. $45x^3 - 15x^2$

16. $5a^2 + 10a$

17. $11x + 44x^2$

18. $14x - 18x^2$

19. $18y^2 - 24y$

20. $3x^3 + 9x^2 + 36x$

21. $2m^3 - 16m^2 + 8m$

22. $12ax + 20bx + 32cx$

Find the **error in the following problems. Rewrite the correct answer.**

23. $3x - 15 = 3(x - 15)$

24. $14x + 7 = 7(2x)$

The error is _____

The error is _____

The correct answer is _____

The correct answer is _____

Multiply the following.

25. $(x + 2)(x - 3)$

26. $(x + 2)(x + 3)$

27. $(x - 2)(x + 3)$

Factor the following Basic Trinomials

28. $x^2 - 13x + 36$

29. $x^2 - 17x + 42$

30. $x^2 + 12x + 35$

31. $x^2 - 15x + 54$

32. $x^2 - 16x + 63$

33. $x^2 + 15x + 50$

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

35. $x^2 + 11x + 24$

36. $x^2 - 5x + 14$