

Foundations of Math 2

Review for Factoring Quiz

Name _____

Per/Sec. _____ Score ___/___

Factor.

1. $5a - 35$

2. $4x^2 - 7x^3$

3. $4a^3 - 2a^2b$

4. $c^2 - 16$

5. $36m^3 + 30m^2 - 66m$

6. $12k^3 + 21k^5$

7. $x^2 - 225$

8. $16 - r^2$

9. $c^2 - 36d^2$

10. $a^2 - 100$

11. $x^4 - 49$

12. $25p^2 - 81$

13. $81p - p^3$

14. $y^2 + 7y + 10$

15. $x^2 - 8x + 15$

16. $x^2 + x - 30$

17. $x^2 - 18x + 81$

18. $p^2 - 4p - 21$

19. $a^3 - 11a^2 + 28a$

20. $2x^2 + 20x + 42$

21. $3x^2 - 10x + 7$

22. $3z^2 + 8z - 11$

23. $5y^2 - 14y - 3$

24. $15y^2 - y - 2$

1. **Common factors:**

a. $4x^2y^3 + 6x^5y^2 - 10x^4y^7$

b. $12x^5y^2 - 18x^2y + 21x^4y^3$

2. **Difference of 2 squares:**

a. $x^2 - 49$

b. $x^2 - 81$

c. $4x^2 - 25y^2$

d. $9x^2 - 16$

3. **Trinomials (a = 1):**

a. $x^2 - 5x - 24$

b. $x^2 + 6x - 16$

c. $x^2 + 10x + 9$

d. $x^2 - 17x + 30$

4. **Trinomials (a ≠ 1):**

a. $3x^2 + 7x + 2$

b. $4x^2 - 11x + 7$

c. $6x^2 - 7x - 10$

d. $3x^2 - 2x - 8$

5. **Mixture with GCF's to pull out first:**

a. $2x^2 + 10x - 28$

b. $3x^2 - 12x - 63$

c. $4x^2 - 10x - 24$

d. $15x^2 + 6x - 9$

e. $4x^2 - 100$

f. $3x^2 + 15$

6. Total mixture of everything:

a. $x^2 + 12x - 45$

b. $6x^2 + 5x - 6$

c. $2x^2 - 98$

d. $2a^3b^2 - 16a^2b^3 + 8ab$

e. $5ax^2 - 20ay^2$

f. $9x^2 - 25y^2$

h. $x^2 - x - 56$

i. $8x^2 + 10x - 12$

j. $x^2 - 9x - 36$

l. $3x^2 + 8x + 4$