

NAME _____

DATE _____

Module 12 Simplifying Algebraic Expressions by
Factoring Polynomials

Lesson 1 Factoring by Removing the Greatest
Common Factor



**additional
practice**

Factor, if possible.

1. $3a + 18$

3. $7g + 49$

5. $5m^2 - 10m$

7. $9a^2 + 10b^2$

9. $25g^9 - 45g^7$

11. $12x^2 - 24x + 24$

13. $5y^4 + 20y^3 - 15y^2$

15. $21c^2 - 14c^3 - 28c^4$

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

19. $14g^3h^5 - 7gh^4$

2. $9m - 27$

4. $12h - 24$

6. $15a^4 + 30a^2$

8. $30j^3 - 48j^5$

10. $22a - 2a^3$

12. $8a^2 + 12a + 3$

14. $81z^5 + 72z^3 + 36z^2$

16. $32h^2 - 16h^5 + 8h^7$

18. $6a^2b^2 + 12ab$

20. $16cd^2 - 12c^2f$

21. $12x^5y^2 - 36x^4y^5 + 60xy^3$

22. $45ab^5 + 18ab - 27a^2b^2$

23. $m^2n^3 - m^3n^2 + mn^3$

24. $r^3s^5 + r^2s^4 + rs^3$

25. $72y^3z - 36yz^2 + 54y^3z^4$

26. $192m^2n^2 - 96mn^3 - 64m^3n^2$

27. $72uv^2 - 48u^2v^3 + 120uv^5$

28. $80p^5q^2 - 48p^6q^3 - 64p^5q^3$

