NAME _____ DATE _____

Practice

Student Edition
Pages 581–586

Factoring Differences of Squares

Factor each polynomial, if possible. If the polynomial cannot be factored, write prime.

1. $a^2 - 4$

2. $y^2 - 1$

3. $x^2 - 64$

4. $1 - 49c^2$

5. $-16 + p^2$

6. $100r^2 - 9$

7. $36 - n^2$

8. $144 - 9f^2$

9. $-r^2s^2 + 81$

10. $5c^2 - 4d^2$

11. $4g^2 - 81h^2$

12. $36j^2 - 49m^2$

13. $8n^2 - 72p^2$

14. $20q^2 - 5r^2$

15. $s^4t^2 - 4t^2$

16. $36n^2 - 25$

17. $49 - 100k^2$

18. $32 - 8n^2$

19. $t^2 - 64u^2$

20. $121r^2 - 1$

21. $2yz^4 - 50yz^2$

22. $25v^5x - 9v^3x$

23. $4t^2 - s^4t^2$

24. $200y^2z^5 - 242y^4z^3$

25. $75x^2 - 147y^2$

26. $32h^2 - 18\ell^2$

27. $x^2 + y^2$

28. $x^2y^2 - z^2$

29. $-4c^2 + 25$

30. $j^2 - 33k^2$

31. $100b^4 - 169$

32. $24e^2 - 54f^4$

33. $32a^2 - 50b^2$

34. $-98r^2 + 8t^2$

35. $x^{12} - 4x^2$

36. $3\ell^2 - \frac{1}{3}$

37. $\frac{1}{4}u^2 - \frac{9}{4}$

38. $9t^6m^4 - 196t^8m^4$

39. $5v^2 - \frac{5}{4}$

40. $64v^7x^3 - 121vx^7$

41. $2z^2 - 196c^2$

42. $85p^2 - 17q^2$

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