

10.3 Split the Middle

Factor.

29. $2x^2 + 5x + 2$

32. $15y^2 - y - 2$

35. $6x^2 + 5x - 4$

38. $8y^2 - 2y - 1$

41. $2y^2 + 7y + 5$

44. $2b^2 + 13b + 15$

47. $8x^2 - 10xy + 3y^2$

50. $-21x^2 - 3x - 8$

53. $12x^2 - 29xy + 14y^2$

56. $3x^2 - 8xy - 3y^2$

30. $3x^2 + 11x + 10$

33. $6y^2 - 17y + 12$

36. $9x^2 + 6x - 8$

39. $3y^2 + 4y - 7$

42. $12y^2 + 7y + 1$

45. $3a^2 - 10a - 25$

48. $14x^2 - 57xy - 27y^2$

51. $2x^2 + 7x + 6$

54. $56x^2 + 15x - 56$

57. $64a^2 + 112ab + 49b^2$

31. $9y^2 + 3y - 2$

34. $21x^2 + 5x - 6$

37. $5x^2 - 16x + 3$

40. $x^2 - 4x - 32$

43. $3x^2 - 11x + 6$

46. $2n^2 + 9n - 5$

49. $18 - 9y - 35y^2$

52. $40c^2 + 39cd - 40d^2$

55. $16a^2 + 56ab + 49b^2$

58. $18x^2 - 57x + 35$

10.4 Difference of Two Squares

Factor each polynomial. When a polynomial cannot be factored over the integers, write Prime.

9. $y^2 - 9$

13. $4x^2 - 9$

17. $x^2y^2 - a^2$

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

25. $4x^2 + 16y^2$

10. $x^2 - 4$

14. $9x^2 - 4$

18. $y^6 - 100$

22. $-25 + 4x^2y^2$

26. $81x^2 - 64y^2$

11. $x^2 - 25$

15. $16y^2 - 36$

19. $9x^4y^2 - b^2$

23. $x^2 + y^2$

27. $25x^2 - 49$

12. $y^2 - 36$

16. $-64 + 4x^2$

20. $1 - 81y^2$

24. $x^2 - y^4$

28. $49 - 25x^2$