NAME _____ DATE _____

Practice

Student Edition
Pages 587–593

Perfect Squares and Factoring

Determine whether each trinomial is a perfect square trinomial. If so, factor it.

1. $a^2 + 2a + 1$
2. $2c^2 - 4c + 9$
3. $4d^2 - 4d + 1$
4. $r^2 + 4r + 4$

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

5. $x^2 - 6x + 9$
6. $m^2 + 16m + 64$
7. $s^2 - 14s + 49$
8. $a^2 - 14 + 36$
9. $c^2 + 24c + 144$
10. $49z^2 - 56z + 16$
11. $25v^2 + 30v + 9$
12. $36s^2 - 24s + 4$
13. $4 - 28t + 49t^2$
14. $9p^2 + 12pq + 4q^2$
15. $16m^2 - 24mn + 9n^2$
16. $9r^2 + 48rt + 64t^2$
17. $28m^2 - 28mp + 7p^2$
18. $16s^2 + 56s + 49$
19. $16c^2 + 72cd + 81d^2$
20. $9k^2 - 30k - 25$
21. $\frac{1}{9}h^2 - 4hj + 36j^2$
22. $\frac{1}{4}x^2 - 5xz + 25z^2$
23. $4e^2 - 44ef + 121f^2$
24. $16a^4 - 40a^2b^3 + 25b^6$
25. $c^2d^2 - 2cde + e^2$
26. $\frac{1}{16}m^2 - \frac{1}{4}mn + \frac{1}{4}n^2$