NAME _____ DATE _____

Practice

Student Edition
Pages 346–352

Completing the Square

Find the value of c that makes each trinomial a perfect square.

1. $a^2 + 12a + c$

2. $h^2 - 20h + c$

3. $p^2 - p + c$

4. $m^2 + 11m + c$

5. $t^2 + \frac{5}{6}t + c$

6. $u^2 - \frac{u}{4} + c$

7. $b^2 - \frac{5}{3}b + c$

8. $x^2 + 17x + c$

Find the exact solution for each equation by completing the square.

9. $x^2 - 14x + 19 = 0$

10. $n^2 + 16n - 7 = 0$

11. $d^2 + d - 5 = 0$

12. $v^2 + 18 = 9v$

13. $3x^2 - 5x + 2 = 0$

14. $2x^2 + 8x - 3 = 0$

15. $2b^2 - 5b - 6 = 0$

16. $p^2 + 8p + 10 = 0$

17. $q^2 - 9q + 11 = 0$

18. $3a^2 + a - 2 = 0$

19. $c^2 + 6c + 8 = 0$

20. $2d^2 - 10d + 5 = 0$