

# 8-6 Skills Practice

## Solving $x^2 + bx + c = 0$

Factor each polynomial.

1.  $t^2 + 8t + 12$

2.  $n^2 + 7n + 12$

3.  $p^2 + 9p + 20$

4.  $h^2 + 9h + 18$

5.  $n^2 + 3n - 18$

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

7.  $y^2 - 5y - 6$

8.  $g^2 + 3g - 10$

9.  $r^2 + 4r - 12$

10.  $x^2 - x - 12$

11.  $w^2 - w - 6$

12.  $y^2 - 6y + 8$

13.  $x^2 - 8x + 15$

14.  $b^2 - 9b + 8$

15.  $t^2 - 15t + 56$

16.  $-4 - 3m + m^2$

Solve each equation. Check the solutions.

17.  $x^2 - 6x + 8 = 0$

18.  $b^2 - 7b + 12 = 0$

19.  $m^2 + 5m + 6 = 0$

20.  $d^2 + 7d + 10 = 0$

21.  $y^2 - 2y - 24 = 0$

22.  $p^2 - 3p = 18$

23.  $h^2 + 2h = 35$

24.  $a^2 + 14a = -45$

25.  $n^2 - 36 = 5n$

26.  $w^2 + 30 = 11w$