

## Extra Practice

### Lesson 9-4

(pages 495–500)

Factor each trinomial, if possible. If the trinomial cannot be factored using integers, write prime.

10.  $(2m - 3)(4m + 1)$    17.  $(3c + d)(4c - 5d)$    18.  $(5n - m)(6n + m)$
1.  $4a^2 + 4a - 63$    2.  $3x^2 - 7x - 6$    3.  $4r^2 - 25r + 6$    4.  $2z^2 - 11z + 15$    5.  $3a^2 - 2a - 21$    6.  $4y^2 + 11y + 6$    7.  $6n^2 + 7n - 3$    8.  $5x^2 - 17x + 14$    9.  $2n^2 - 11n + 13$  prime  
10.  $8m^2 - 10m - 3$    11.  $6y^2 + 2y - 2$    12.  $2r^2 + 3r - 14$    13.  $5a^2 - 3a + 15$  prime   14.  $18v^2 + 24v + 12$    15.  $4k^2 + 2k - 12$    16.  $10x^2 - 20xy + 10y^2$    17.  $12c^2 - 11cd - 5d^2$    18.  $30n^2 - mn - m^2$   
**10**( $x - y$ )( $x - y$ )

Solve each equation. Check your solutions.

19.  $8t^2 + 32t + 24 = 0$  **{−3, −1}**   20.  $6y^2 + 72y + 192 = 0$  **{−8, −4}**   21.  $5x^2 + 3x - 2 = 0$  **{−1,  $\frac{2}{5}$ }**  
22.  $9x^2 + 18x - 27 = 0$  **{−3, 1}**   23.  $4x^2 - 4x - 4 = 4$  **{−1, 2}**   24.  $12n^2 - 16n - 3 = 0$   
25.  $12x^2 - x - 35 = 0$  **{− $\frac{5}{3}$ ,  $\frac{7}{4}$ }**   26.  $18x^2 + 36x - 14 = 0$  **{− $\frac{7}{3}$ ,  $\frac{1}{3}$ }**   27.  $15a^2 + a - 2 = 0$  **{− $\frac{2}{5}$ ,  $\frac{1}{3}$ }**  
28.  $14b^2 + 7b - 42 = 0$    29.  $13r^2 + 21r - 10 = 0$    30.  $35y^2 - 60y - 20 = 0$   
31.  $16x^2 - 4x - 6 = 0$  **{− $\frac{1}{2}$ ,  $\frac{3}{4}$ }**   32.  $28d^2 + 5d - 3 = 0$  **{− $\frac{3}{7}$ ,  $\frac{1}{4}$ }**   33.  $30x^2 - 9x - 3 = 0$  **{− $\frac{1}{5}$ ,  $\frac{1}{2}$ }**