Algebra I   Worksheet #1   Unit 12   Selected Homework Solutions

Use the factoring method to solve each equation.

3. $x^2 - x - 20 = 0$
    $(x - 5)(x + 4) = 0$
    $x - 5 = 0$ or $x + 4 = 0$
    $x = 5$ or $x = -4$

5. $2x^2 - 7x + 3 = 0$
    $(2x - 1)(x - 3) = 0$
    $2x - 1 = 0$ or $x - 3 = 0$
    $2x = 1$
    $x = 1/2$ or $x = 3$

13. $3x^2 - 7x = 0$
    $x(3x - 7) = 0$
    $x = 0$ or $3x - 7 = 0$
    $3x = 7$
    $x = 0$ or $x = 7/3$

16. $9x^2 - 16 = 0$
    $(3x - 4)(3x + 4) = 0$
    $3x - 4 = 0$ or $3x + 4 = 0$
    $3x = 4$ $3x = -4$
    $x = 4/3$ or $x = -4/3$
    $x = \pm 4/3$

17. $x^2 - 6x + 9 = 0$
    $(x - 3)^2 = 0$
    $x - 3 = 0$
    $x = 3$

20. $25x^2 + 40x + 16 = 0$
    $(5x + 4)^2 = 0$
    $5x + 4 = 0$
    $5x = -4$
    $x = -4/5$