Essential Skills: Algebra

Solve each equation.

1) $-62 = -2(1 + 5n)$

2) $-2(2 + 6x) = -5(4 + 4x)$

Solve each equation by factoring.

3) $n^2 - 13n + 42 = 0$

4) $6x^2 - 36x = 0$

Solve each equation with the quadratic formula.

5) $3m^2 - 1 = 3m$

Solve each equation. Remember to check for extraneous solutions.

6) $-6 + \sqrt{b + 6} = 1$

Solve each equation.

7) $\left|-2x\right| + 3 = 11$

Solve each inequality.

8) $-3\left(5n - 5\right) + n \le 85$

Solve each equation.

9) $32^{3m} = 16$

Use substitution to find the x-coordinate of the solution to each system.

10) $y = 3x - 2$
$5x - 2y = 4$