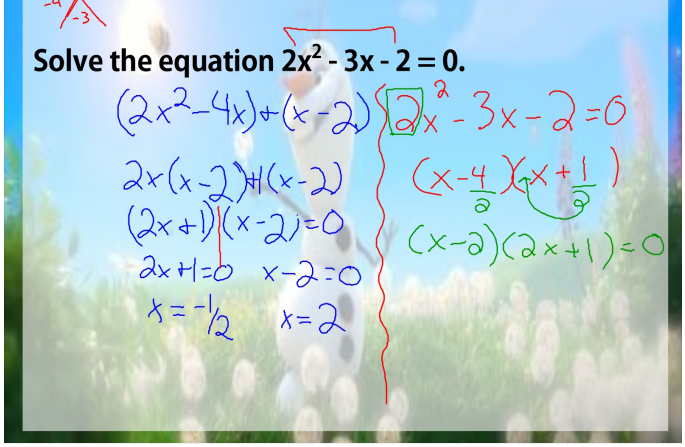
Warm-up

Solve the equation $2x^2 - 3x - 2 = 0$.



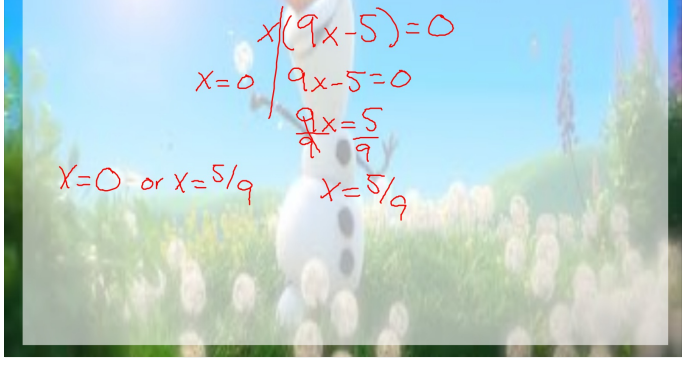
Precalculus

Chapter P.5
Solving Equations Graphically, Numerically, and Algebraically

HW: #1-9 on P5 and P7 Review Worksheet

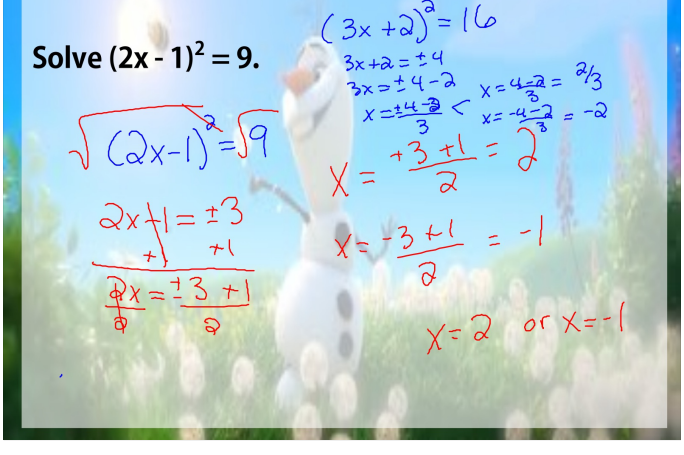
Solving by Factoring

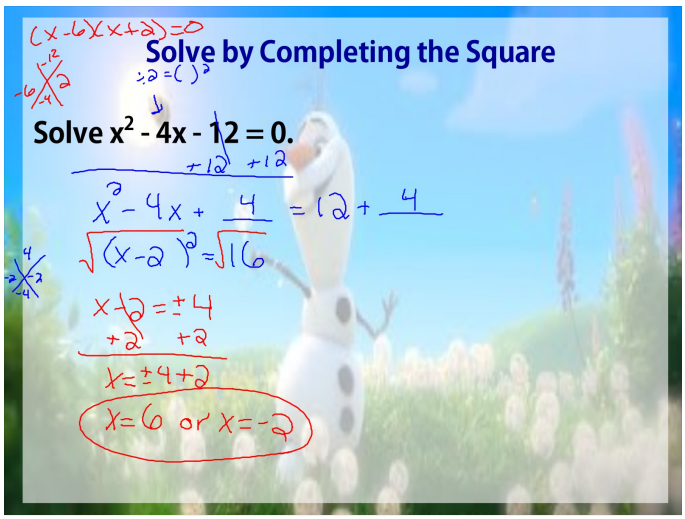
Solve the equation $9x^2 - 5x = 0$.

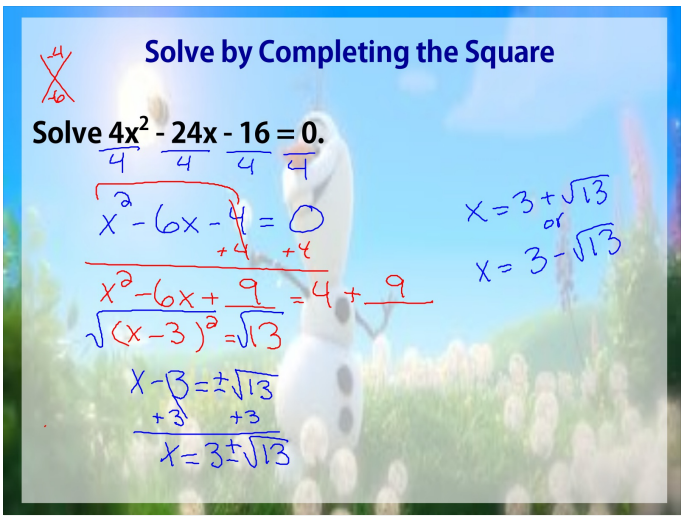


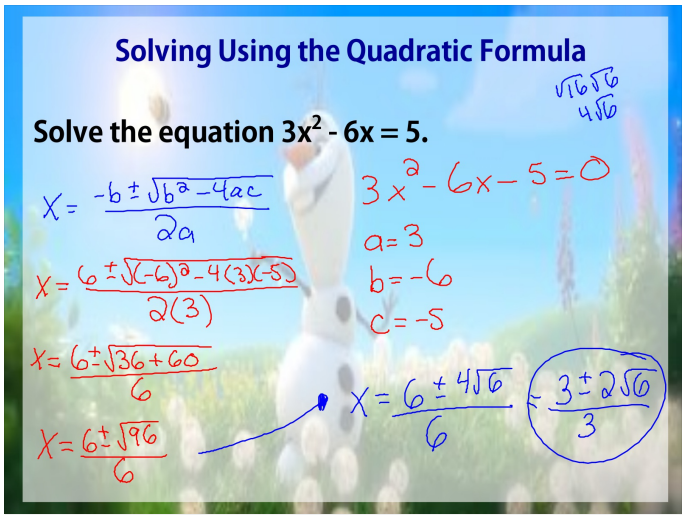
Solving By Square Roots

Solve $(2x - 1)^2 = 9$.




Solve by Completing the Square
Solve $x^2 - 4x - 12 = 0$.
$x^2 - 4x + 4 = 12 + 4$
$(x-2)^2 = 16$
$x - 2 = \pm 4$
$x = \pm 4 + 2$
$x = 6$ or $x = -2$


Solve by Completing the Square
Solve $4x^2 - 24x - 16 = 0$.
$x^2 - 6x - 4 = 0$
$x^2 - 6x + 9 = 4 + 9$
$(x-3)^2 = 13$
$x - 3 = \pm\sqrt{13}$
$x = 3 \pm \sqrt{13}$
$x = 3 + \sqrt{13}$ or $x = 3 - \sqrt{13}$


Solving Using the Quadratic Formula
Solve the equation $3x^2 - 6x = 5$.
$3x^2 - 6x - 5 = 0$
$a = 3$
$b = -6$
$c = -5$
$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$
$x = \frac{6 \pm \sqrt{(-6)^2 - 4(3)(-5)}}{2(3)}$
$x = \frac{6 \pm \sqrt{36 + 60}}{6}$
$x = \frac{6 \pm \sqrt{96}}{6}$
$x = \frac{6 \pm 4\sqrt{6}}{6}$
$= \frac{3 \pm 2\sqrt{6}}{3}$