

Solving a Quadratic Equation – using the Solve command.

Enter $x^2 + 6x + 5 = 0$ and tap EXE.

Note there may be two, one or no real solutions to a quadratic equation, as shown below.

Remember to use the **Interactive, Advanced, solve** wizard if the variable is not **x** and change the variable as required.

Edit Action Interactive
 $x^2 + 6x + 5 = 0$
 $x^2 + 6 \cdot x + 5 = 0$
 solve(
 $\{x = -5, x = -1\}$
 Math1 Line $\frac{\square}{\square}$ $\sqrt{\square}$ π \rightarrow
 Math2 \square^{\square} e^{\square} \ln \log_{\square} $\sqrt[\square]{\square}$
 Math3 $|\square|$ x^2 x^{-1} $\log_{10}(\square)$ solve(
 Trig $\square\square\square$ toDMS $\{\square\}$ $\{\}$ $(\)$
 Var $\square\square\square$ sin cos tan $^{\circ}$ $^{\circ}$
 abc sin cos tan $^{\circ}$ $^{\circ}$
 Alg Standard Real Deg

Edit Action Interactive
 $x^2 + 6x + 9 = 0$
 $x^2 + 6 \cdot x + 9 = 0$
 solve(
 $\{x = -5, x = -1\}$
 $x^2 + 6 \cdot x + 9 = 0$
 solve(
 $\{x = -3\}$
 $x^2 + 6 \cdot x + 7 = 0$
 $x^2 + 6 \cdot x + 7 = 0$
 solve(
 $\{x = -\sqrt{2} - 3, x = \sqrt{2} - 3\}$
 $x^2 + 6 \cdot x + 12 = 0$
 $x^2 + 6 \cdot x + 12 = 0$
 solve(
 No Solution
 Math1 Line $\frac{\square}{\square}$ $\sqrt{\square}$ π \rightarrow
 Math2 \square^{\square} e^{\square} \ln \log_{\square} $\sqrt[\square]{\square}$
 Math3 $|\square|$ x^2 x^{-1} $\log_{10}(\square)$ solve(
 Trig $\square\square\square$ toDMS $\{\square\}$ $\{\}$ $(\)$
 Var $\square\square\square$ sin cos tan $^{\circ}$ $^{\circ}$
 abc sin cos tan $^{\circ}$ $^{\circ}$
 Alg Standard Real Deg

solve
 Solve
 Solve numerically
 Equation: $y^{(2)} = 9$
 Variable: y
 OK Cancel
 Math1 Line $\frac{\square}{\square}$ $\sqrt{\square}$ π \rightarrow
 Math2 \square^{\square} e^{\square} \ln \log_{\square} $\sqrt[\square]{\square}$
 Math3 $|\square|$ x^2 x^{-1} $\log_{10}(\square)$ solve(
 Trig $\square\square\square$ toDMS $\{\square\}$ $\{\}$ $(\)$
 Var $\square\square\square$ sin cos tan $^{\circ}$ $^{\circ}$
 abc sin cos tan $^{\circ}$ $^{\circ}$
 Alg Standard Real Deg

Edit Action Interactive
 $y^2 = 9$
 $y^2 = 9$
 solve(
 No Solution
 solve($y^2 = 9, y$)
 $\{y = -3, y = 3\}$
 Math1 Line $\frac{\square}{\square}$ $\sqrt{\square}$ π \rightarrow
 Math2 \square^{\square} e^{\square} \ln \log_{\square} $\sqrt[\square]{\square}$
 Math3 $|\square|$ x^2 x^{-1} $\log_{10}(\square)$ solve(
 Trig $\square\square\square$ toDMS $\{\square\}$ $\{\}$ $(\)$
 Var $\square\square\square$ sin cos tan $^{\circ}$ $^{\circ}$
 abc sin cos tan $^{\circ}$ $^{\circ}$
 Alg Standard Real Deg