Discriminant

Case 1

Solutions

Graph

Extensions

Quadratic Equation

Finding a, b, and c.

Graph

Simplifying Square Roots

Approximate Solutions

Exact Solutions

What is the meaning of the solutions?

Case 2

Solutions

Graph

Case 3

Solutions

Graph

# Quadratic Formula

Discriminant



Case 1

>0

Solutions

2 real

Graph

Crosses x-axis twice

Extensions

CONSTRUCTION-Finding the dimensions of a rectangular figure

CHEMISTRY-Describing the equilibrium concentrations of ions in aqueous solutions

PHYSICS-Finding the height or distance an object travels

CIVIL ENGINEERING-Designing a highway

Quadratic Equation



Finding a, b, and c.

a=\_\_x2

b=\_\_x

c=constant

Graph

PARABOLA!

Simplifying Square Roots

Use rules of radicals

Approximate Solutions

Use calculator to get decimal answer of 

Exact Solutions

Leave answer in simplified  form

What is the meaning of the solutions?

quadratic formula is used to find the real roots of a quadratic equation

Case 2

=0

Solutions

1 real

Graph

Crosses x-axis once

Case 3

<0

Solutions

No real

Graph

Does not cross x-axis

# Quadratic Formula

