Quadratic Equations Practice

Name: _____ Class: _____ Date: _____

Solve the following quadratic equations using the appropriate method (factoring, quadratic formula). Show all your work.

Open Ended Questions

1. Solve the quadratic equation by factoring: .....

2. Solve the quadratic equation using the quadratic formula: .....

3. Solve the quadratic equation by factoring: .....

4. Solve the quadratic equation using the quadratic formula: .....

5. Solve the quadratic equation by factoring: .....

6. Solve the quadratic equation using the quadratic formula: .....

Multiple Choice Questions

1. Solve the quadratic equation: .....

a) .....
b) .....
c) .....
d) .....

2. Solve the quadratic equation using the quadratic formula: .....

a) .....
b) .....

c) .....
d) .....

3. Solve the quadratic equation by factoring: .....
a) ....
b) ...
c) ..
d) ...

4. Solve the quadratic equation using the quadratic formula: .....
a) .....
b) .....
c) .....
d) .....

5. Solve the quadratic equation by factoring: .....
a) .....
b) .....
c) .....
d) .....

6. Solve the quadratic equation using the quadratic formula: .....
a) .....
b) .....
c) .....
d) .....

Quadratic Equations Practice - Answers

Name: _____ Class: _____ Date: _____

Solve the following quadratic equations using the appropriate method (factoring, quadratic formula). Show all your work.

Open Ended Questions

1. Solve the quadratic equation by factoring: .....

To factor the quadratic equation ....., we look for two numbers that multiply to 6 and add to -5. These numbers are -2 and -3. Thus, we can write the equation as: ...... Setting each factor to zero gives us the solutions: ... and ..

2. Solve the quadratic equation using the quadratic formula: .....

The quadratic formula is given by .... For the equation ....., we have ..., ..., and ..... Plugging these values into the formula, we get: ..... Simplifying inside the

square root: ..., which further simplifies to ... Thus, ... This gives us two solutions: ... and ...

3. Solve the quadratic equation by factoring: ...

To factor the quadratic equation ..., we look for two numbers that multiply to 4 and add to 4. These numbers are 2 and 2. Thus, we can write the equation as: .... Setting each factor to zero gives us the solution: ...

4. Solve the quadratic equation using the quadratic formula: ...

The quadratic formula is given by ... For the equation ..., we have ..., ..., and .... Plugging these values into the formula, we get: ... Simplifying inside the square root: ..., which further simplifies to ... Thus, ... This gives us the solution: ...

5. Solve the quadratic equation by factoring: ...

To factor the quadratic equation ..., we look for two numbers that multiply to -12 and add to -1. These numbers are -4 and 3. Thus, we can write the equation as: .... Setting each factor to zero gives us the solutions: ... and ...

6. Solve the quadratic equation using the quadratic formula: ...

The quadratic formula is given by ... For the equation ..., we have ..., ..., and .... Plugging these values into the formula, we get: ... Simplifying inside the square root: ..., which further simplifies to ... Thus, ... This gives us two solutions: ... and ...

Multiple Choice Questions

1. Solve the quadratic equation: ...

a) ...
b) ...
c) ...
d) ...

2. Solve the quadratic equation using the quadratic formula: ...

a) ...
b) ...
c) ...
d) ...

3. Solve the quadratic equation by factoring: ...

a) ...
b) ...
c) ...
d) ...

4. Solve the quadratic equation using the quadratic formula: .....

a) .....
b) .....
c) .....
d) .....

5. Solve the quadratic equation by factoring: .....

a) .....
b) .....
c) .....
d) .....

6. Solve the quadratic equation using the quadratic formula: .....

a) .....
b) .....
c) .....
d) .....