4-NA-0101-0100F-001-1-00

Factorize .

1. 
2. 
3. 
4. 

4-NA-0101-0100F-002-1-00

Factorize .

1. 
2. 
3. 
4. 

4-NA-0101-0100F-003-1-00

Factorize .

1. 
2. 
3. 
4. 

4-NA-0101-0100F-004-1-00

Factorize .

1. 
2. 
3. 
4. 

4-NA-0101-0100F-005-1-00

Factorize .

1. 
2. 
3. 
4. 

4-NA-0101-0100F-006-1-00

Solve .

1.  or 
2.  or 
3.  or 
4.  or 

4-NA-0101-0100F-007-1-00

Factorize .

1. 
2. 
3. 
4. 

4-NA-0101-0100F-008-1-00

Solve .

1. 
2. 
3. 
4. 

4-NA-0101-0100F-009-1-00

Solve .

1.  or 
2.  or 
3.  or 
4.  or 

4-NA-0101-0100F-010-1-00

Solve  .

1.  or 
2. 
3.  or 
4. 

4-NA-0102-0100F-001-1-00

Which of the following is a quadratic equation in *x* whose roots are 0 and?

1. 
2. 
3. 
4. 

4-NA-0102-0100F-002-1-00

Which of the following is a quadratic equation in *x* whose roots are  and 5?

1. 
2. 
3. 
4. 

4-NA-0102-0100F-003-1-00

Which of the following is a quadratic equation in *x* whose roots are both 8?

1. 
2. 
3. 
4. 

4-NA-0102-0100F-004-1-00

It is given that the roots of equation  are  and  where .Which of the following equations whose roots are  and ?

1. 
2. 
3. 
4. 

4-NA-0102-0100F-005-1-00

It is given that the roots of a quadratic equation in *x* are  and . This equation is

1. .
2. .
3. .
4. .

4-NA-0106-0600F-001-1-00

The figure shows the graph of . Find the root(s) of .

Chart, line chart

Description automatically generated



1.  or 
2. 
3. 
4.  or 

4-NA-0106-0600F-002-1-00

By using the method of completing the square, convert  to the form .

1. 
2. 
3. 
4. 

4-NA-0106-0600F-003-1-00

Solve .

1.  or 
2.  or 
3.  or 
4.  or 

4-NA-0106-0600F-004-1-00

Solve .

1.  or 
2.  or 
3.  or 
4.  or 

4-NA-0106-0600F-005-1-00

Which of the following quadratic equation(s) is/are in general form?

1. 
2. 
3. 
4. I only
5. II only
6. All of the above
7. None of the above

4-NA-0106-0600F-006-1-00

Solve the quadratic equation , where *a*, *b* and *c* are constants by using quadratic formula.

1. 
2. 
3. 
4. 

4-NA-0106-0600F-007-1-00

Solve the quadratic equation  by using quadratic formula.

1. 
2. 
3. 
4. 

4-NA-0106-0600F-008-1-00

Solve  correct to 3 significant figures.

1.  or 
2.  or 
3.  or 
4.  or 

4-NA-0105-0100F-001-1-00

Find the value of the discriminant of the equation .

1. 13
2. 37
3. 
4. 

4-NA-0105-0100F-002-1-00

By using the discriminant of the quadratic equation, determine the nature of roots of equation .

1. Two unequal real roots
2. Two equal real roots
3. No real roots

4-NA-0105-0100F-003-1-00

By using the discriminant of the quadratic equation, find the number of

*x*-intercept(s)of the graph .

1. 1
2. 2
3. 0

4-NA-0105-0100F-004-1-00

If the quadratic equation  has two equal roots, find the value or range of values of *k*.

1. 
2. 
3. 
4. 

4-NA-0105-0100F-005-1-00

If the quadratic equation  has two unequal roots, find the value or range of values of *k*.

1. 
2. 
3. 
4. 

4-NA-0105-0100F-006-1-00

If the graph of  does not intersect the *x*-axis, find the value or range of values of *k*.

1. 
2. 
3. 
4. 

4-NA-0106-0500F-001-1-00

The figure shows the graph of . Solve  graphically.

Chart, line chart

Description automatically generated

1.  or 
2. 
3. 
4.  or 

4-NA-0106-0500F-002-1-00

It is given that the value of discriminant of the quadratic equation  is less than 0, find the number of *x*-intercept(s)of the graph .

1. 0
2. 1
3. 2
4. Cannot be determined.

4-NA-0106-0500F-003-1-00

It is given that the graph of the curve has only one *x*-intercept, find the value or range of values of *k*.

1. 
2. 
3. 
4. 

4-NA-0106-0500F-004-1-00

If the graph of  has two *x*-intercepts. Find the range of values of *k*.

1. 
2. 
3. 
4. 

4-NA-0106-0100F-001-1-00

The product of two real number  and  is . Which of the following equation is correct?

1. 
2. 
3. 
4. 

4-NA-0106-0100F-002-1-00

 and  are two positive integers. The product of  and is , find the value of *x*.

1. 
2.  or 
3. 
4. 

4-NA-0106-0100F-003-1-00

The length and the width of a rectangle are cm and cm respectively. If the area of the rectangle is 24 cm2, which of the following equation is correct?

1. 
2. 
3. 
4. 

4-NA-0106-0100F-004-1-00

The base and the height of a triangle are cm and cm respectively. If the area of the triangle is 12 cm2, find *x*.

1. 3
2. 4.58
3. 1.61
4. 4

4-NA-0106-0100F-005-1-00

Ada and Cindy have 2*x* coins and (*x*+5) coins in their purses respectively. The product of the number of coins in their purses is 300. Which of the following equation is correct?

1. 
2. 
3. 
4. 

4-NA-0106-0100F-006-1-00

The age of Andy and Ben are  and  respectively. If the product of their age is 180, how old is Andy?

1. 15
2. 12
3. 22
4. 10

4-NA-0107-0200N-001-1-00

If ** and **  are the roots of quadratic equation , find the values of  and .

1. ,
2. ,
3. ,
4. ,

4-NA-0107-0200N-002-1-00

If ** and **  are the roots of quadratic equation , find the value of ****.

1. 
2. 1.5
3. 
4. 

4-NA-0107-0200N-003-1-00

If the sum of roots of a quadratic equation  is 2, find the value of *k*.

1. 0.25
2. 
3. 0.75
4. 1

4-NA-0107-0200N-004-1-00

Given that  and  are the roots of quadratic equation . Find the value of *k*.

1. 12
2. 4
3. 6
4. 20

4-NA-0109-0100N-001-1-00

Which of the following(s) is/are rational?

I. 

II. 

III. 

1. II and III only
2. II only
3. III only
4. I, II and III

4-NA-0109-0100N-002-1-00

Which of the following is irrational?

1. 
2. 
3. 
4. 

4-NA-0109-0100N -003-1-00

Which of the following can be convert to rational?

1. 
2. 
3. 
4. I and II only
5. I only
6. III only
7. I, II and III

4-NA-0109-0100N-004-1-00

Which of the following is/are true?

1. All natural number must be a positive integer.
2. All recurring decimals can be converted to a fraction.
3. For a positive integer *a,* is an irrational number.
4. I and II only
5. I only
6. II only
7. I and III only

4-NA-0109-0100N -005-1-00

Imaginary number 

1. .
2. .
3. .
4. *.*

4-NA-0109-0100N-006-1-00

Imaginary number 

1. .
2. .
3. .
4. .

4-NA-0109-0100N-007-1-00

Simplify and express  in the form of .

1. 
2. 
3. 
4. 

4-NA-0109-0100N-008-1-00

Simplify and express  in the form of .

1. 
2. 
3. 
4. 

4-NA-0109-0100N-009-1-00

Simplify and express  in the form of .

1. 
2. 
3. 
4. 

4-NA-0109-0100N-010-1-00

Simplify and express  in the form of .

1. 
2. 
3. 
4. 1

4-NA-0109-0100N-011-1-00

Simplify and express  in the form of .

1. 
2. 
3. 
4. 3