MTH210

Question: The complex conjugate of the complex number z = a + ib is _____
Answer: a – ib

Question: The general polynomial in x over R of degree 2 is called ____ polynomial
Answer: quadratic

Question: The complex number z = x +iy is said to be purely imaginary if y is ____
Answer: zero

Answer: 0

Question: If z = 3 + 4i , then |z| is ____
Answer: 5

Question: If z = 5 - 12i , then |z| is ____
Answer: 13

Question: If z = -3 - 4i , then |z| is ____
Answer: 5

Question: If z = -5 -12i , then |z| is ____
Answer: 13

Question: The principle that if P(n) be a statement about a positive integer n, such that P(1) is true, and if P(m) is true for some m in N, then P(m + 1) is true, and P(n) is true for every n in Z is called _____
Answer: induction

Question: The sum of (-1 - 3i) and (9 - 6i) is _____
Answer: (8 – 9i)

Answer: 8 – 9 i

Question: The sum of (-2 - 5i) and (9 + 6i) is ____
Answer: (7 + i)

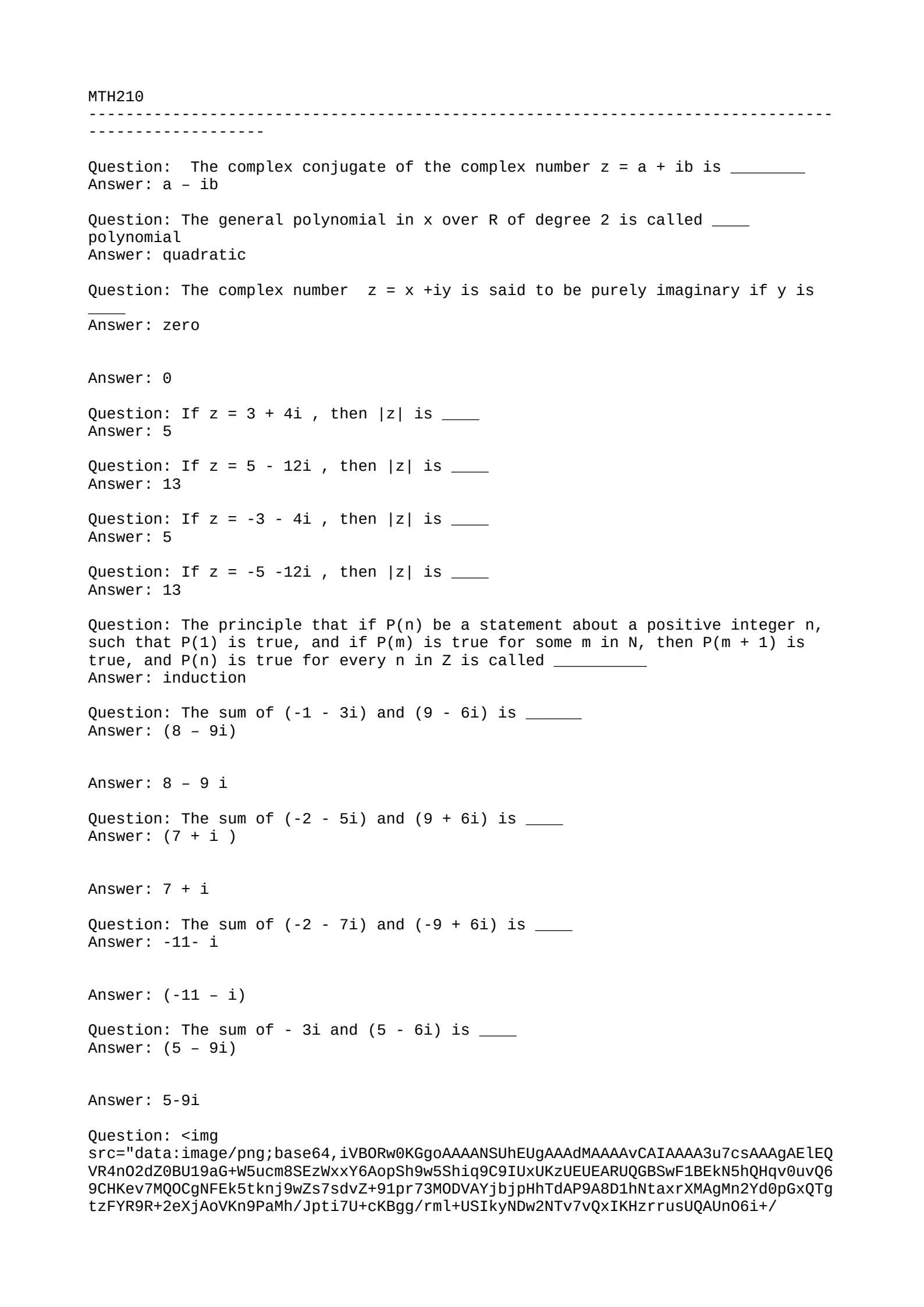
Answer: 7 + i

Question: The sum of (-2 - 7i) and (-9 + 6i) is ____
Answer: -11- i

Answer: (-11 – i)

Question: The sum of - 3i and (5 - 6i) is ____
Answer: (5 – 9i)

Answer: 5-9i

Question: 

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Answer: De Moivre’s

Answer: D’Moivre’s

Question: <img src="@@PLUGINFILE@@/Picture41.png" alt=""> are complex numbers, then <img src="
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ggA=" alt="">= _____
Answer: 2(cos4+isin4)

Question: Let <img src="@@PLUGINFILE@@/Picture39.png" alt=""> are complex numbers, then <img
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ggA=" alt="">= _____
Answer: 3i

Answer: 3i

Question: The difference between (2 - 3i) and (-5 + 8i) is ____
Answer: (7 – 11i)

Question: (-3 - 4 i) - (-1 -7i) is ____
Answer: (-2 +3i)

Answer: -2+3i

Question: The values of x and y in 3x - 5i = -12 - iy is____
Answer: -4 and 5

Question: If = …….
Answer: 6+3i

Question: A function f (z) is _____ at c if <img
src="@@PLUGINFILE@@/Picture36.png" alt=""/>
Answer: Continuous

Question: are complex numbers, then
Answer: 2

Question: Let <img src="@@PLUGINFILE@@/Picture34.png" alt="">are complex numbers, then <img
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RTYPqxzBvIsdMhw52xtLIZmvCQT+uk/MYwwjtQNdXomOn8WgmgAAAAASUVORK5CYIIA" alt="">=
_____
Answer:

Answer:

Question: The set of all numbers that are rational is ____
Answer: finite

Question: If we have a function takes on different values as increases by then the point is called a _____of the function
Answer: branch point

Question: If f(z) is continuous in a closed and bounded region R, then |f(z)| is _____ in the region
Answer: bounded

Question: If an analytic function is smooth, then it is ____
Answer: infinitely differentiable

Question: A function f is _____ if it is differentiable for all points in an open disk centred at
Answer: holomorphic

Question: The real part of an analytic function is _____
Answer: harmonic

Question: (-4 - 3i) - (-2 -7i) = _____
Answer: (-2 + 4i)

Answer: -2+4i

Question: Let are complex numbers, then
Answer: 6(1+i)

Question: (4 - 3i) + (-2 -7i) = _____
Answer: (2 – 10i)

Answer: 2-10i

Question: The _____ measures the distance between two complex numbers
Answer: absolute value

Answer: modulus

Question:
Answer: 2i

Question:
Answer: 0

Answer: zero

Question:
Answer:

Answer: infinity

Question:
Answer:

Answer: 0.2

Question:
Answer: 2

Answer: two

Question:
Answer:

Answer: 0.2

Question: A function f (z) is complex _____ at c if
Answer: differentiable

Question: ____ is used to represent complex numbers geometrically
Answer: Argand diagram

Question: A branch point is said to be of order _____ whenever a function is an n-valuedfunction in the neighbourhood
Answer: n -1

Question: Sets S and T are said to be____ if every element of S is an element of T and every element of T is an element of S.
Answer: equal

Question: A line which connects two and only two branch points is called a _____
Answer: branch cut

Answer: branch line

Question: Evaluate =

Answer: i^3-i^2+1-i

Question: If the derivative *f* ' of a function *f* has a simple pole at a point a, then *f* has a _____ point at a.
Answer: logarithmic branch

Question: Letbe an analytic function and if eitheror is constant, then is_____
Answer: constant

Question: Letbe an analytic function and if is constant is constant, then   is _____
Answer: constant

Question:
Answer: 3

Question:
Answer: 4

Question:
Answer: 1

Question: For complex numbers
obeys the associativity of addition property
Answer:

Question: The polar form of the complex number is given by …….
Answer:

Question: The number x in the complex number x - iy is the same as ……..
Answer: Re (x + iy)

Question: The conjugate of the conjugate of a complex number is ……
Answer: the complex number

Question: The conjugate of is
……..
Answer:

Question: The numerical value of in complex analysis is ……..
Answer: -1

Question: in complex analysis is equal to……..
Answer: 1

Question: in complex analysis is equal to……..
Answer:

Question: Two complex numbers are equal if
Answer:

Question: If is a complex number, then z is said to be …… if y = 0
Answer: purely real

Question: The harmonic conjugate of the harmonic function   is given by
Answer:

Question: In an Argand diagram, the purely imaginary numbers lie along the ……
Answer: y-axis

Question: The complex conjugate of the conjugate of the complex number is …….
Answer:

Question: One of the following is a complex number
Answer: None of the options

Question: If = ……
Answer: 5

Question: |z| = …… if
Answer: 4

Question: Find |z| if
Answer: 7

Question: The complex number
has its polar form given by …….
Answer:

Question: One of the following statements in not correct if f(z) = u + v is an analytic function
Answer: a non-constant analytic function can take only real or only pure imaginary values

Question: Let be a complex function, then is analytic in a domain D iff
Answer: v is a harmonic conjugate to u in D

Question: Let   be a complex number , then the argument of z is
Answer:

Question: Let = ……
Answer:

Question: Let
Answer:

Question: In an Argand diagram, the purely real numbers lie along the ……
Answer: x-axis

Question: All but one of the following are true
Answer: The differences of analytic functions are analytic

Question: ----- is the branch cut of inverse cosecant
Answer: (-1,1)

Question: The distributive property for the complex numbers
Answer:

Question: An example of Branch points is
Answer: All the options are examples

Question: One of the following is true about a continuous function
Answer: all the options are true for a continuous function

Question: One of the following conditions is not equivalent to others ifis an infinitely differentiable function defined on an open set
Answer: f is a compact function

Question: A function f(z) is complex differentiable at c if
Answer:

Question: One of the following is not an analytic function
Answer: Absolute value function

Question: A function f is called ……. if it is differentiable for all points in an open disk centred at
Answer: holomorphic

Question: has …….. real solutions
Answer: no

Question: One of these expresses commutative law
Answer:

Question: All but one of the following are true about a complex number
Answer: The imaginary part of

Question: If <img src="" alt="">and , then <img src="" alt="">
Answer: <img src="" alt="">

Question: The Fundamental Theorem of Algebra states that
Answer: Every non-constant polynomial with coefficients in the set of complex numbers, C (or set of real numbers, R) has a root in C

Question: If
Answer: .

Question: Simplify
Answer:

Question: = …….
Answer: 4

Question: Evaluate <img src="@@PLUGINFILE@@/Picture16.png" alt="">using Euler’s equation
Answer: -1

Question: One of the properties of the square of the absolute value is
Answer:

Question: Let , evaluate
Answer:

Question: The absolute value of the conjugate of a complex number is the …….
Answer: absolute value of the complex number

Question: Given that then z in polar form would be
Answer:

Question: The conjugate of the quotient of two complex numbers is the same as
Answer: quotient of the conjugates of the two complex numbers provided the denominator is not zero

Question: Evaluate the modulus of 3 -7i
Answer: 58

Question: The modulus of -3+7i is
Answer: 58

Question: If an analytic function is smooth, then it is ……..
Answer: infinitely differentiable