# Math 1201 Unit 3 Graded Quiz

College Algebra (University of the People)

Question **1**
Correct
Mark 1.00 out of 1.00
Flag question
Question text
If A = 3 + 2i and B = 4 − i, then AB would be?
Select one:
a. 14 + 5i
b. 10 + 5i
c. 7 + i
d. 10 − 5i
e. None of these
Feedback
Your answer is correct.
The correct answer is: 14 + 5i

Question **2**
Correct
Mark 1.00 out of 1.00
Flag question
Question text
The graph of $f(x) = x^3 - 6x^2 + 4x + 1$ hits the x-axis how many times?
Select one:
a. 0
b. 1
c. 2
d. 3
e. 4
Feedback
Your answer is correct.
The correct answer is: 3

Question **3**
Correct
Mark 1.00 out of 1.00
Flag question

Question text
The graph of $f(x) = x^2 + 6x + 10$ hits the x-axis how many times?
Select one:
a. 0
b. 1
c. 2
d. 3
e. 4
Feedback
Your answer is correct.
The correct answer is: 0

Question **4**
Incorrect
Mark 0.00 out of 1.00
Flag question
Question text
What is $i^{103}$?
Select one:
a. 1
b. -1
c. i
d. -i
e. None of these
Feedback
Your answer is correct.
The correct answer is: -i

Question **5**
Incorrect
Mark 0.00 out of 1.00
Flag question
Question text
If I know a real root of $f(x) = x^3 -6x^2 + 11x - 6$ is neither 1, even, or negative, a good guess would be?
Select one:
a. 0

b. 3
c. 6
d. 11
e. None of these
Feedback
Your answer is correct.
The correct answer is: 3

Question **6**
Correct
Mark 1.00 out of 1.00
Flag question
Question text
If A = 4 + 2i and B = 7 -3i, A − B = ?
Select one:
a. -3 + 5i
b. -3
c. -3 − i
d. -3 + i
e. 1 + 9i
Feedback
Your answer is correct.
The correct answer is: -3 + 5i
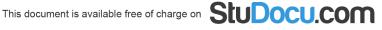
Question **7**
Correct
Mark 1.00 out of 1.00
Flag question
Question text
The graph of $f(x) = 6x^5 − 5x^4 + 12x^3 + 8x^2 + 2x + 9$ would have, at most, how many x-intercepts?
Select one:
a. 0
b. 2
c. 5
d. 6
e. 9

Feedback
Your answer is correct.
The correct answer is: 5

Question **8**
Correct
Mark 1.00 out of 1.00
Flag question
Question text
If f(x) = $x^8$ - 1 is divided by x -2, the remainder would be?
Select one:
a. -1
b. 0
c. 1
d. 255
e. None of these
Feedback
Your answer is correct.
The correct answer is: 255

Question **9**
Correct
Mark 1.00 out of 1.00
Flag question
Question text
If A = 3 and B = 4 + i, A/B = ?
Select one:
a. 3/4
b. 12/17 – (3/17)i
c. 12/5 + (3/5)i
d. 12/17 + (3/17)i
e. None of these
Feedback
Your answer is correct.
The correct answer is: 12/17 – (3/17)i

Question **10**
Correct

Mark 1.00 out of 1.00

Flag question

Question text

What is $f(x) = x^8 - 1$ divided by $x - 1$?

Select one:

a. $x^2 + 1$

b. $x^2 - 1$

c. $x^7 + x^6 + x^5 + x^4 + x^3 + x^2 + x + 1$

d. $x^6 + x^5 + x^4 + x^3 + x^2 + x + 1$

e. $x^7 + x^6 + x^5 + x^4 + x^3 + x^2 + x$

Feedback

Your answer is correct.

The correct answer is: $x^7 + x^6 + x^5 + x^4 + x^3 + x^2 + x + 1$