Math 2312 – Pre-Calculus ***Exam* 4** ***Review***

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1. If  with *A* in QII and  with *B* in QIII, find the exact value of each of the following:
2.  *b*)  *c*)  *d*) 
3. If , find
4.  *b*)  *c*)  *d*)  *e*) 
5. Find the solution of the equation that are in the interval [0, 2π)
6. 
7. 
8. 
9. 
10. 
11. 
12. Find the exact value of the expression whenever it is defined:
13. 
14. ****
15. ****
16. ****
17. ****
18. 
19. 
20. 
21. 
22. 
23. Sketch the graph of the equation
24. 
25. 
26. Convert to rectangular coordinates 
27. Convert to polar coordinates 
28. Convert to polar coordinates 
29. Write the equation in rectangular coordinates



1. Find a polar equation that has the same graph as the equation in *x* and *y*.



1. Write complex form in trigonometric form



1. Write  in standard form.
2. Find the quotient . Write the result in rectangular form.
3. Find  and express the result in rectangular form.
4. Find ***fifth*** roots of  and express the result in rectangular form.

***Solution***

1. *a*)  *b*)  *c*)  *d*) 
2. *a*)  *b*)  *c*)  *d*)  *e*) 
3. ***a***)  ***b***)  ***c***) 

***d***)  ***e***)  ***f***) 

1. ***a***)  ***b***)  ***c***)  ***d***)  ***e***)  ***f***) 

***g***)  ***h***)  ***i***)  ***j***) 

|  |  |
| --- | --- |
|  |  |

1. 
2. 
3. 
4. 
5. 
6. 
7. 
8. 
9. 
10. 