

EMCF25 – Math 1432, 13209

The answer sheet for this assignment can be found by logging into *CourseWare* at <http://www.casa.uh.edu>, selecting **Math 1432(13209)**, clicking on the **EMCF** tab at the top of the page, and selecting **EMCF25**.

For Test 3...

1. Students should be prepared to find the partial fraction decomposition of a rational expression.
 - a. True
 - b. False
2. Students should be prepared to use trigonometric substitution to do an integration.
 - a. True
 - b. False
3. Students should be prepared to parameterize line segments and other curves.
 - a. True
 - b. False
4. Students should be prepared to graph polar curves of the forms $r = a + b \cos(\theta)$, $r = a + b \sin(\theta)$, $r = a$, $r = a \cos(\theta)$, $r = a \sin(\theta)$, $r = a \cos(m\theta)$ and $r = a \sin(m\theta)$.
 - a. True
 - b. False
5. Students should be prepared to give polar coordinates for points given in Cartesian coordinates.
 - a. True
 - b. False
6. Students should be prepared to rewrite curves given parametrically as equations in x and y .
 - a. True
 - b. False
7. Students should be prepared to find the equation of a tangent line or normal line to a curve that is given parametrically.
 - a. True
 - b. False
8. Students should be prepared to find points on parametric curves where tangents are either horizontal or vertical.
 - a. True
 - b. False
9. Students should be prepared to find the length of a curve given parametrically.
 - a. True
 - b. False

10. Students should be prepared to find the length of a curve given in either $y = f(x)$ form or polar form.
 - a. True
 - b. False
11. Students should be prepared to find the area of a portion of a polar plot WITHOUT BEING GIVEN THE GRAPH(S).
 - a. True
 - b. False.
12. Students should be prepared to use the midpoint, trapezoid and Simpson's methods to approximate definite integrals, and they should know how to use the midpoint and trapezoid methods to compute Simpson's method.
 - a. True
 - b. False
13. Students should be prepared to determine whether a sequence or set is bounded above or below. They should also know that a sequence that has a limit is automatically bounded, and that the converse is not true.
 - a. True
 - b. False
14. Students should be prepared to find the LUB or GLB of a sequence or set.
 - a. True
 - b. False.
15. Students should know what it means for a sequence to be monotone, and be prepared to determine whether a sequence is increasing or decreasing.
 - a. True
 - b. False
16. Students should be prepared to find the limit of a sequence or state that the limit does not exist, and also understand the terms "convergent" and "divergent."
 - a. True
 - b. False
17. Students should be prepared to READ CAREFULLY so that they know when they are asked to do a full computation and when they are only asked to set up a problem.
 - a. True
 - b. False
18. Students should be prepared to do any example from class, any problem from an online quiz, any problem from the written homework, and any problem from a Friday recitation quiz.
 - a. True
 - b. False
19. Students should be prepared to show their work in an organized way.
 - a. True
 - b. False
20. Students should work every problem that they can get their hands on to prepare for this test.
 - a. True
 - b. False