

EMCF20 – 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 **EMCF20**.

- Find the slope of the tangent line to the parametric curve $(t^3 + 2t, t^2 + 1)$ at the point where $t = 1$.
 - 1/5
 - 2/5
 - 5
 - 5/2
 - None of these.
- Find the slope of the tangent line to the parametric curve $(t + 2, t^2 - 2t)$ at the point where $t = -1$.
 - 4
 - 1/4
 - 0
 - Undefined
 - None of these.
- Give the derivative of parameterization $(t^3 + 2t, t^2 + 1)$ at the point where $t = 1$.
 - $5i + 2j$
 - 5/2
 - 2/5
 - $2i + 5j$
 - None of these.
- Give the derivative of parameterization $(t + 2, t^2 - 2t)$ at the point where $t = -1$.
 - 4
 - $i - 4j$
 - i
 - 0
 - None of these.
- Find the tangent line to the parametric curve $(t^3 + 2t, t^2 + 1)$ at the point where $t = -1$, and then give the value of y where this line intersects the y -axis.
 - 31/25
 - 32/25
 - 33/25
 - 34/25
 - None of these.

6. Find the tangent line to the parametric curve $(t^3 + 2t, t^2 + 1)$ at the point where $t = -1$, and then give the value of x where this line intersects the x -axis.
- $14/5$
 - 3
 - $16/5$
 - $17/5$
 - None of these.
7. Find the tangent line to the parametric curve $(t^3 + 2t, t^2 + 1)$ at the point where $t = -1$, and then give the value of x where this line intersects the line given by $(-1 + 2t, 3 - t)$.
- 70
 - 71
 - 72
 - 73
 - None of these.
8. Find the slope of the tangent line to the parametric curve $(3t - 4t^2, t + 3t^3)$ at the point where $t = 1$.
- 1
 - -1
 - 2
 - -2
 - None of these.
9. Find the slope of the tangent line to the parametric curve $(t^3 - 3t^4, t^2 - t)$ at the point where $t = 2$.
- $1/28$
 - $1/14$
 - $3/28$
 - $1/7$
 - None of these.
10. Find the slope of the normal line to the parametric curve $(t^3 + 2t, t^2 + 1)$ at the point where $t = 1$.
- -5
 - $-5/2$
 - $-1/5$
 - $-2/5$
 - None of these.