**C U R V E S K E T C H I N G W O R K S H E E T**

**CSULB///MATH 122/// SUARAY**

 *f(x)=*

|  |  |
| --- | --- |
| *f′(x)*=*Zeros:* | *f″(x)*=*Zeros:* |
| *f(x)=* | **C. SYMMETRY**Find *f(-x)*=If applicable, determine period *p*: |
| **A. DOMAIN** |
| **D. HORIZ. ASYMPTOTE**Find the following limit(s):**VERT. ASYMPTOTE(s)**Check the following limit(s): |
| **B. y-INTERCEPT**Where *f(x)* crosses y-axis, so set \_\_\_\_\_\_=0:**x-INTERCEPT(s)**Where *f(x)* crosses x-axis, so set \_\_\_\_\_\_=0: |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| **E. INC/DEC**

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| --- | --- | --- | --- | --- |
| INTERVAL |  |  |  |  |
| *f′(x)*  |  |  |  |  |
| *f(x)*  |  |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| INTERVALctd |  |  |  |  |
| *f′(x)*  |  |  |  |  |
| *f(x)*  |  |  |  |  |

**F. LOCAL MAX/MIN**The function *f(x)* has a local \_\_\_\_\_\_\_ value of \_\_\_\_\_\_\_\_\_\_\_\_\_\_ that occurs at \_\_\_\_\_\_\_\_\_\_\_The function *f(x)* has a local \_\_\_\_\_\_\_ value of \_\_\_\_\_\_\_\_\_\_\_\_\_\_ that occurs at \_\_\_\_\_\_\_\_\_\_\_The function *f(x)* has a local \_\_\_\_\_\_\_ value of \_\_\_\_\_\_\_\_\_\_\_\_\_\_ that occurs at \_\_\_\_\_\_\_\_\_\_\_ | **SUMMARY: POINTS TO BE INCLUDED IN THE SKETCH**A. DOMAIN (interval notation)B. INTERCEPTSy: (\_\_\_\_\_ , \_\_\_\_\_)x: (\_\_\_\_\_ , \_\_\_\_\_); (\_\_\_\_\_ , \_\_\_\_\_); (\_\_\_\_\_ , \_\_\_\_\_); (\_\_\_\_\_ , \_\_\_\_\_)C. SYMMETRYOdd? Even? Periodic? None?D. ASYMPTOTESH.A. Equation:\_\_\_\_\_=\_\_\_\_\_\_V.A. Equation(s):\_\_\_\_\_=\_\_\_\_\_\_; \_\_\_\_\_=\_\_\_\_\_\_;\_\_\_\_\_=\_\_\_\_\_\_; \_\_\_\_\_=\_\_\_\_\_\_F. LOCAL EXTREMAMin: (\_\_\_\_\_ , \_\_\_\_\_); (\_\_\_\_\_ , \_\_\_\_\_);(\_\_\_\_\_ , \_\_\_\_\_); (\_\_\_\_\_ , \_\_\_\_\_)Max: (\_\_\_\_\_ , \_\_\_\_\_); (\_\_\_\_\_ , \_\_\_\_\_);(\_\_\_\_\_ , \_\_\_\_\_); (\_\_\_\_\_ , \_\_\_\_\_)G. INFLECTION POINTS(\_\_\_\_\_ , \_\_\_\_\_); (\_\_\_\_\_ , \_\_\_\_\_);(\_\_\_\_\_ , \_\_\_\_\_); (\_\_\_\_\_ , \_\_\_\_\_) |
| **G. CONCAVITY**

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| --- | --- | --- | --- |
| INTERVAL |  |  |  |
| *f″(x)*  |  |  |  |
| *f(x)*  |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| INTERVALctd |  |  |  |
| *f″(x)*  |  |  |  |
| *f(x)*  |  |  |  |

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