**Multiple choices**

|  |  |  |
| --- | --- | --- |
| **1.** | Which of the following is the average rate of change of over the interval | |
|  | **a.)** | **b.)** |
|  | **c.)** | **d.)** |

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **2.** | Using the below table of values for the average rate of change ofover the interval is:   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  |  |  |  |  | |  |  |  |  |  | | |
|  | **a.)** | **b.)** |
|  | **c.)** | **d.)** |

|  |  |  |
| --- | --- | --- |
| **3.** | Which of the following is the average rate of change of over the interval | |
|  | **a.)** | **b.)** |
|  | **c.)** | **d.)** |

**4. Complete each statement by choosing one of the four phrases:** **the absolute maximum, the absolute minimum,** **a relative maximum, a relative minimum.**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **A function defined and continuous on the interval has critical points only at and . The function has values as given in the table below.**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  |  |  |  |  | |  |  |  |  |  | |
|  | **The value locates \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ value of the function.**  **The value is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ value of the function.** |

**5. Approximate the relative and absolute extrema of the function.**

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

**ANSWERS**

**Multiple choices**

|  |  |  |
| --- | --- | --- |
| **1.** | Which of the following is the average rate of change of over the interval | |
|  | **a.)** | **b.)** |
|  | **c.)** | **d.)** |

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **2.** | Using the below table of values for the average rate of change ofover the interval is:   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  |  |  |  |  | |  |  |  |  |  | | |
|  | **a.)** | **b.)** |
|  | **c.)** | **d.)** |

|  |  |  |
| --- | --- | --- |
| **3.** | Which of the following is the average rate of change of over the interval | |
|  | **a.)** | **b.)** |
|  | **c.)** | **d.)** |

**4. Complete each statement by choosing one of the four phrases:** **the absolute maximum, the absolute minimum,** **a relative maximum, a relative minimum.**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **A function defined and continuous on the interval has critical points only at and . The function has values as given in the table below.**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  |  |  |  |  | |  |  |  |  |  | |
|  | **The value locates the absolute minimum value of the function.**  **The value is** the **absolute maximum value of the function.** |

**5. Approximate the relative and absolute extrema of the function.**

|  |  |  |
| --- | --- | --- |
|  |  | Relative minimum  Relative maximum  Absolute minimum  No absolute maxima. |