**Day 4 – Characteristics Practice Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

For each of the following problems, create a graph using the given table of values. Be sure to place the horizontal asymptote at the appropriate location. Once you are finished with your graph, complete the characteristics of the function accordingly.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | |  |  | | --- | --- | | x | y | | -2 |  | | -1 |  | | 0 |  | | 1 |  | | 2 |  | |  | Domain: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Range: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  X-intercept: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ y-intercept: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Interval of Increase: \_\_\_\_\_\_\_\_\_\_ Interval of Decrease: \_\_\_\_\_\_\_\_\_\_\_  Maximum(s): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Minimum(s):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Asymptote: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  End- Behavior:  Find the average rate of change from x=0 to x=2: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
|  | |  |  | | --- | --- | | x | y | | -2 |  | | -1 |  | | 0 |  | | 1 |  | | 2 |  | |  | Domain: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Range: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  X-intercept: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ y-intercept: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Interval of Increase: \_\_\_\_\_\_\_\_\_\_ Interval of Decrease: \_\_\_\_\_\_\_\_\_\_\_  Maximum(s): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Minimum(s):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Asymptote: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  End- Behavior:  Find the average rate of change from x=-2 to x=0: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
|  | |  |  | | --- | --- | | x | y | | -2 |  | | -1 |  | | 0 |  | | 1 |  | | 2 |  | |  | Domain: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Range: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  X-intercept: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ y-intercept: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Interval of Increase: \_\_\_\_\_\_\_\_\_\_ Interval of Decrease: \_\_\_\_\_\_\_\_\_\_\_  Maximum(s): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Minimum(s):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Asymptote: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  End- Behavior:  Find the average rate of change from x=0 to x=2: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
|  | |  |  | | --- | --- | | x | y | | -5 |  | | -4 |  | | -3 |  | | -2 |  | | -1 |  | | 0 |  | | 1 |  | | 2 |  | |  | Domain: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Range: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  X-intercept: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ y-intercept: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Interval of Increase: \_\_\_\_\_\_\_\_\_\_ Interval of Decrease: \_\_\_\_\_\_\_\_\_\_\_  Maximum(s): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Minimum(s):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Asymptote: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  End- Behavior:  Find the average rate of change from x=-4 to x=-1: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |