MAC 2311 Hybrid Calculus I (S)

Name Quiz # 11 4.3,4.5 Take-Home. Show all your work.

1. Make a rough sketch of by answering a) through d)

1. domain: ­­­\_\_\_\_\_\_\_\_\_\_ *x*intercept(s): ­­­\_\_\_\_\_\_\_\_\_*y*intercept: ­­­\_\_\_\_\_\_\_\_\_symmetry (if any): ­­\_\_\_\_\_\_\_\_\_\_\_\_

vertical asymptote(s)\_\_\_\_\_\_\_\_­­­\_\_\_\_\_horizontal asymptote(s)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Critical point(s) (*x*,*y*): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Intervals where *y* is increasing \_\_\_\_\_\_\_\_\_\_\_decreasaing \_\_\_\_\_\_\_\_\_\_ Show sign chart.
3. Intervals where *y* is concave up \_\_\_\_\_\_\_\_\_\_Concave down \_\_\_\_\_\_\_\_\_\_ Show sign chart.
4. Inflection point(s) (if any) \_\_\_\_\_\_\_\_\_\_
5. Graph (lable all points):

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Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2) Find the local maximum and minimum value(s) of using:

(a) the 1st derivative test

Answer(s): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(b) the 2nd derivative test

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