

PC 1-5 Notes

Students will identify local **maxima** and **minima** as well as the absolute maximum and minimum given a graph.

Students will identify intervals on which a function is **concave up** and **concave down**.

1) Determine the interval on which the graph is concave up.

(Find the x-value where it switches from concave UP to concave DOWN to help – don't guess!)

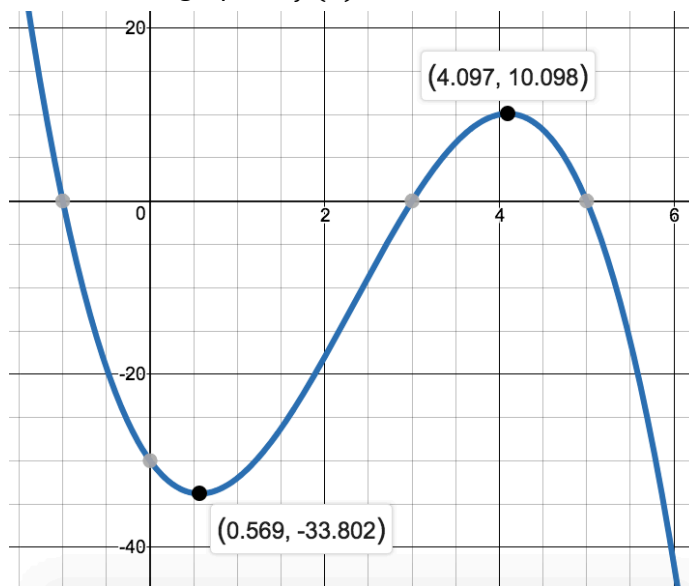
2) Determine the interval on which the graph is concave down.

(Find the x-value where it switches from concave DOWN to concave UP to help – don't guess!)

3) a) At what value(s) of x , if any does the graph of f have a local maximum?

b) List the local maximum values.

The graph of $f(x)$ is shown below



4) a) At what value(s) of x , if any does the graph of f have a local minimum?

b) List the local minimum values.

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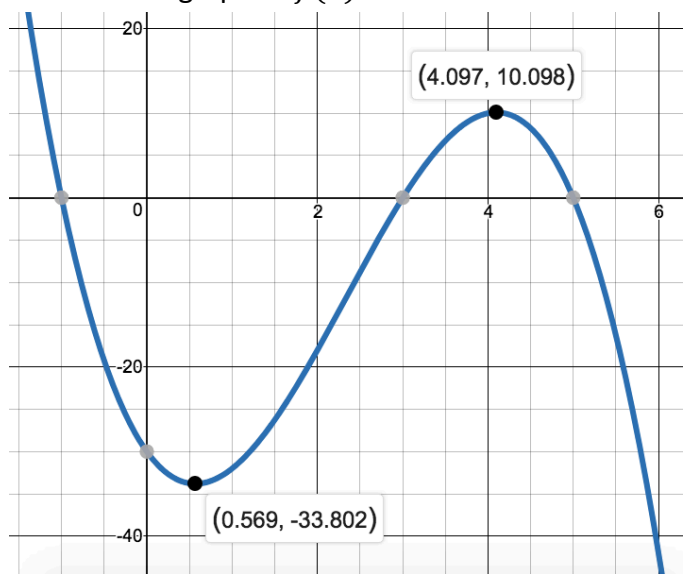
2) Determine the interval on which the graph is concave down.

(Find the x-value where it switches from concave DOWN to concave UP to help – don't guess!)

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b) List the local maximum values.

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