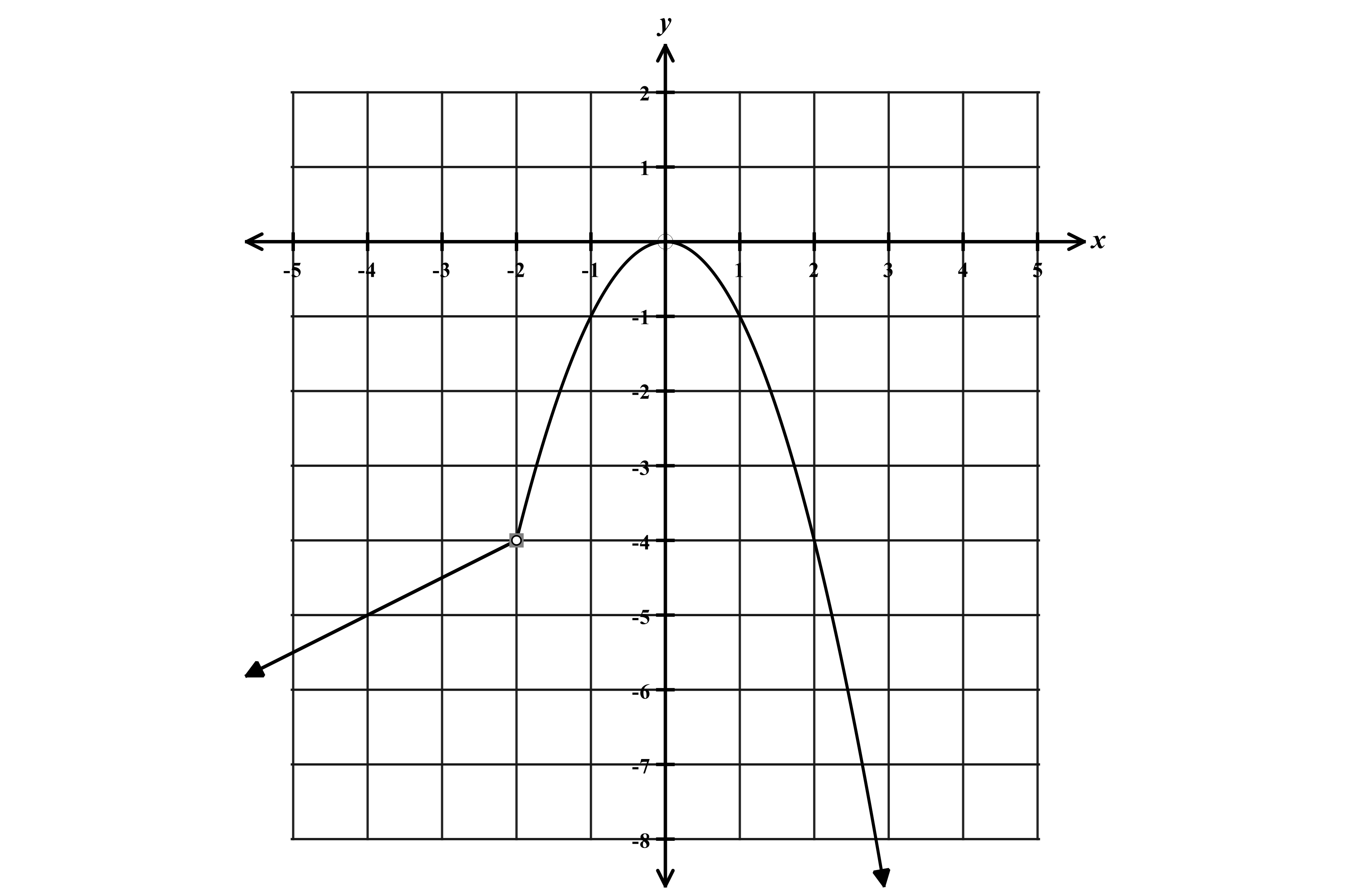
**Algebra 1 Unit 11**

**Piecewise Functions**

|  |  |  |
| --- | --- | --- |
| ***Linear*** | ***Quadratic***    ***or*** | ***Absolute Value*** |
| ***Exponential*** | ***Square Root*** | ***Cube Root*** |

***Exercise #1***

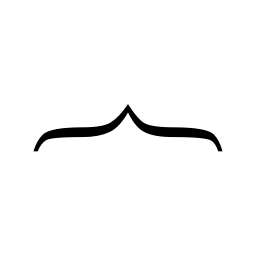


Consider the function graphed to the right.

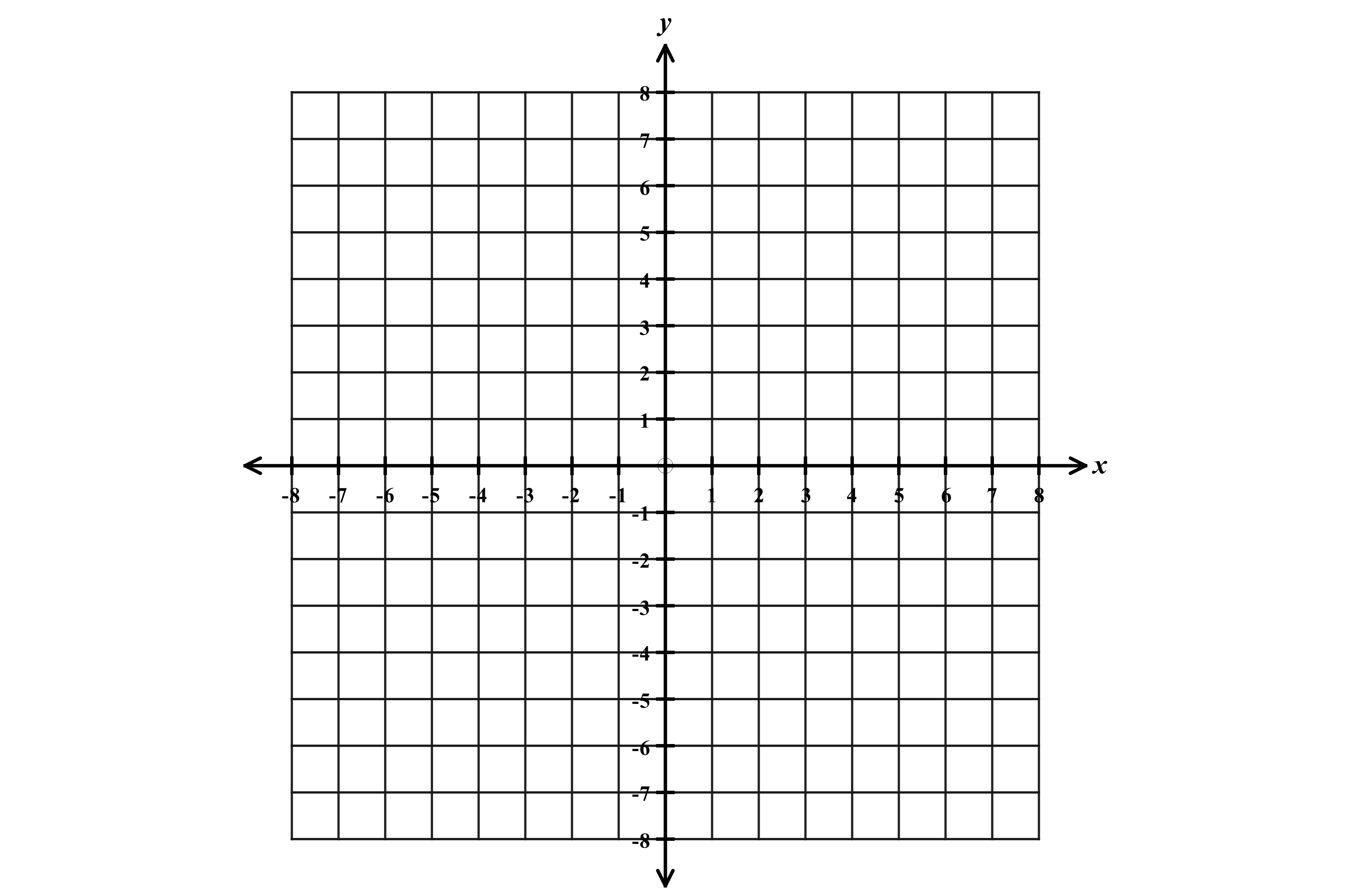
A. What type of function is graphed over the interval

B. What type of function is graphed over the interval

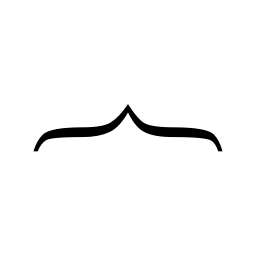
C. Write this function defined as a piecewise function.



D. Over what interval is the function decreasing?

***Exercise #2***

Consider the function defined below.



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A. What type of function is defined over the interval

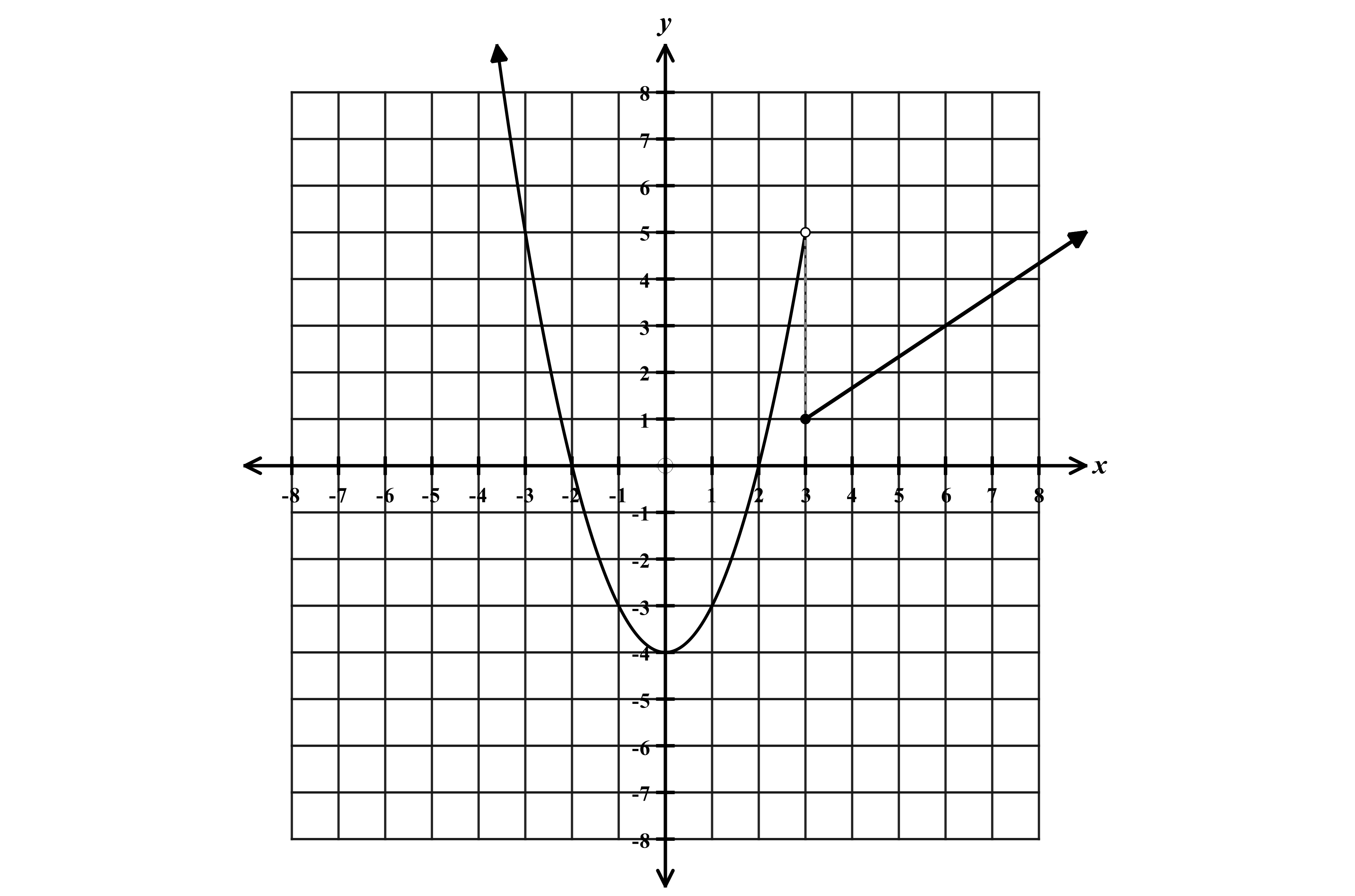
B. What type of function is defined over the interval

C. Graph the function on the grid provided.

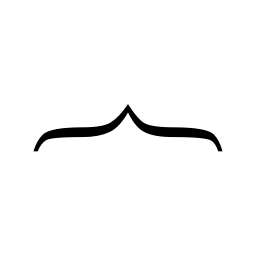
D. Over what interval is the function decreasing?

E. Over what interval is the function increasing?

***Exercise #3***

Consider the function shown on the graph to the right.

A. Write the function rule below.



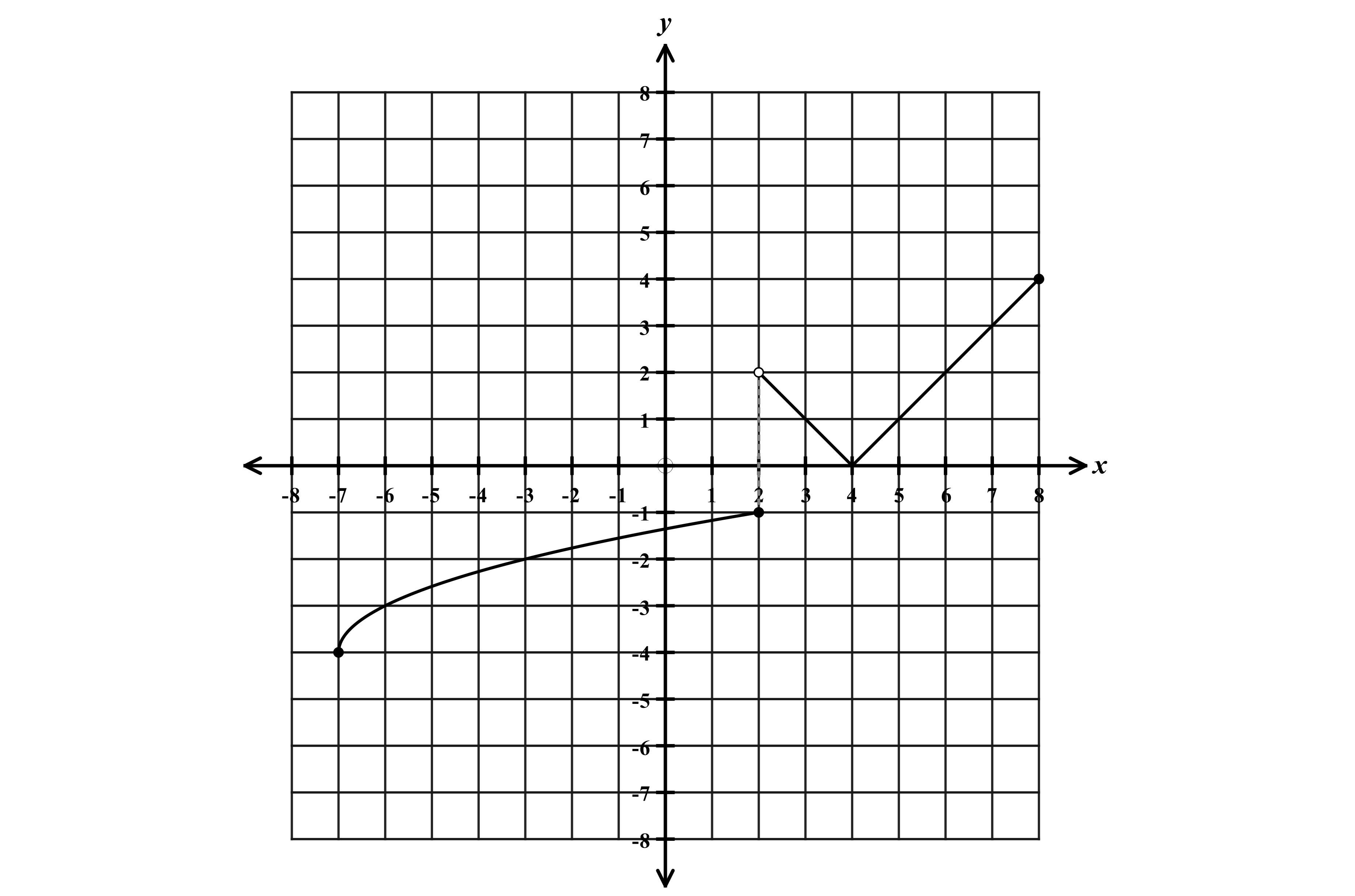
B. Over what interval(s) is increasing?

C. Over what interval(s) is decreasing?

D. Over what interval is

E. What are the zeros (roots) of

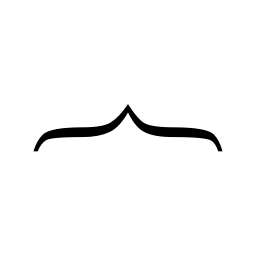
***Exercise #4***

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Consider the function shown on the coordinate plane to the right.

A. What two types of functions make up this piecewise graph?

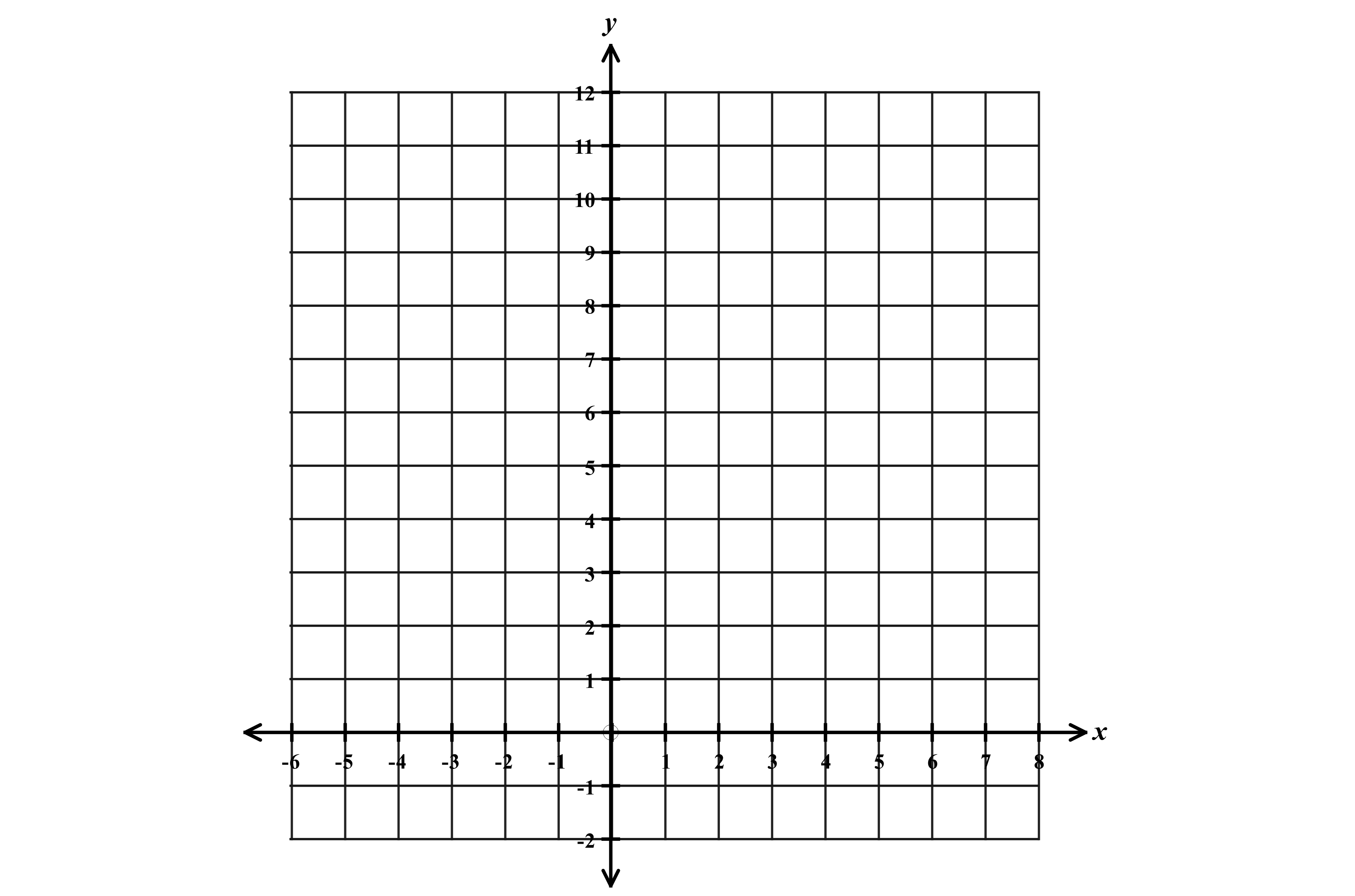
B. Write the function rule below.



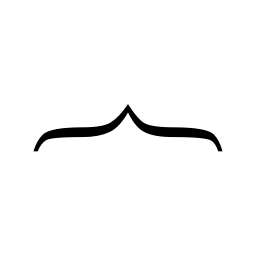
C. Over what interval(s) is the function increasing?

D. Over what intervals is the function decreasing?

E. Over what interval is

***Exercise #5***

Consider the function defined below.

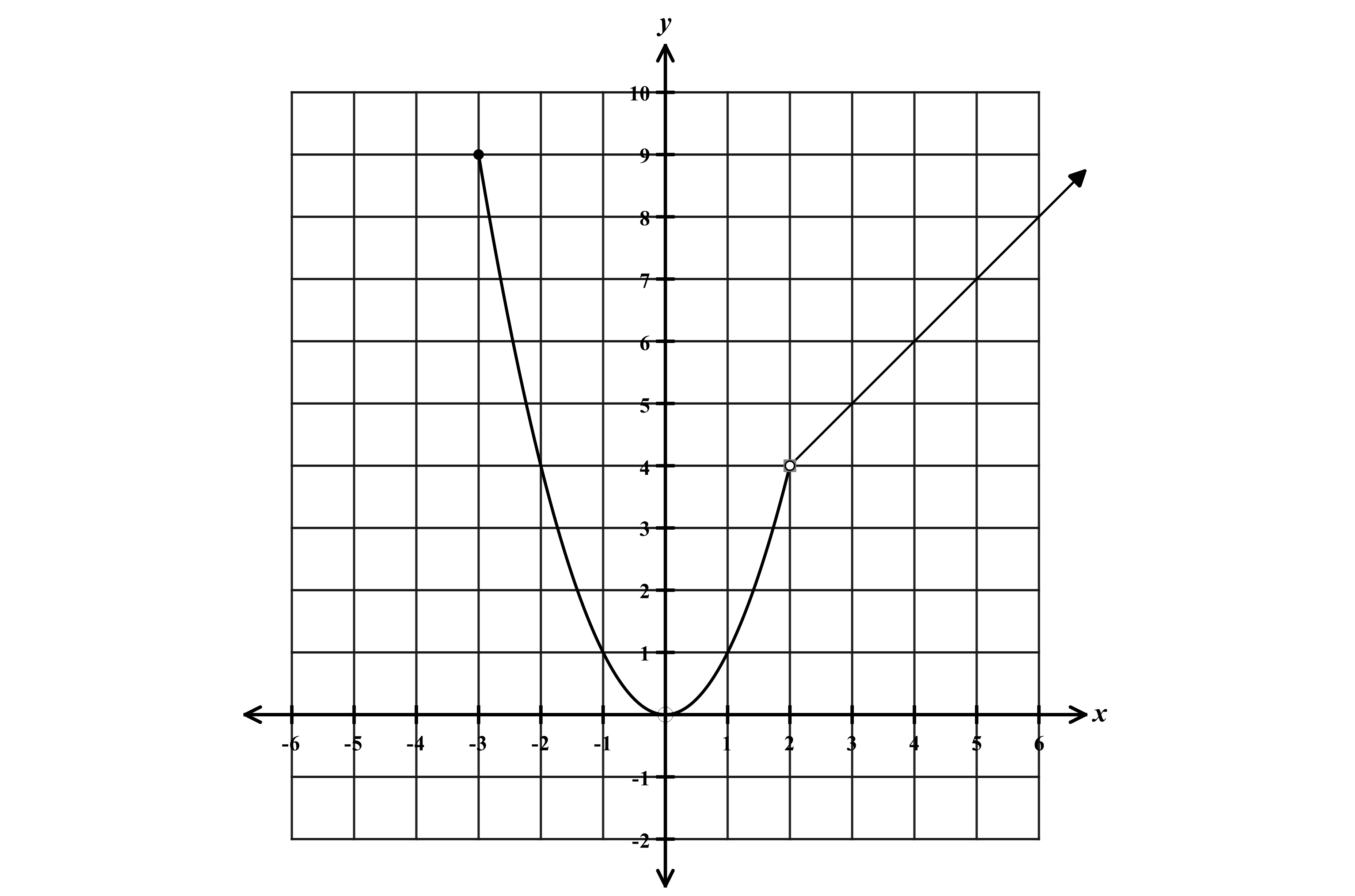
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A. What two types of functions are defined in this function rule?

B. Graph the function on the coordinate plane provided.

***Homework***

***Exercise #1***

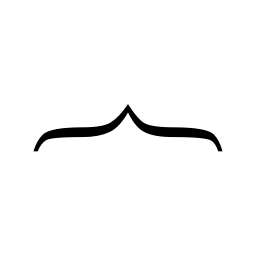


Consider the function graphed to the right.

A. What type of function is graphed over the interval

B. What type of function is graphed over the interval

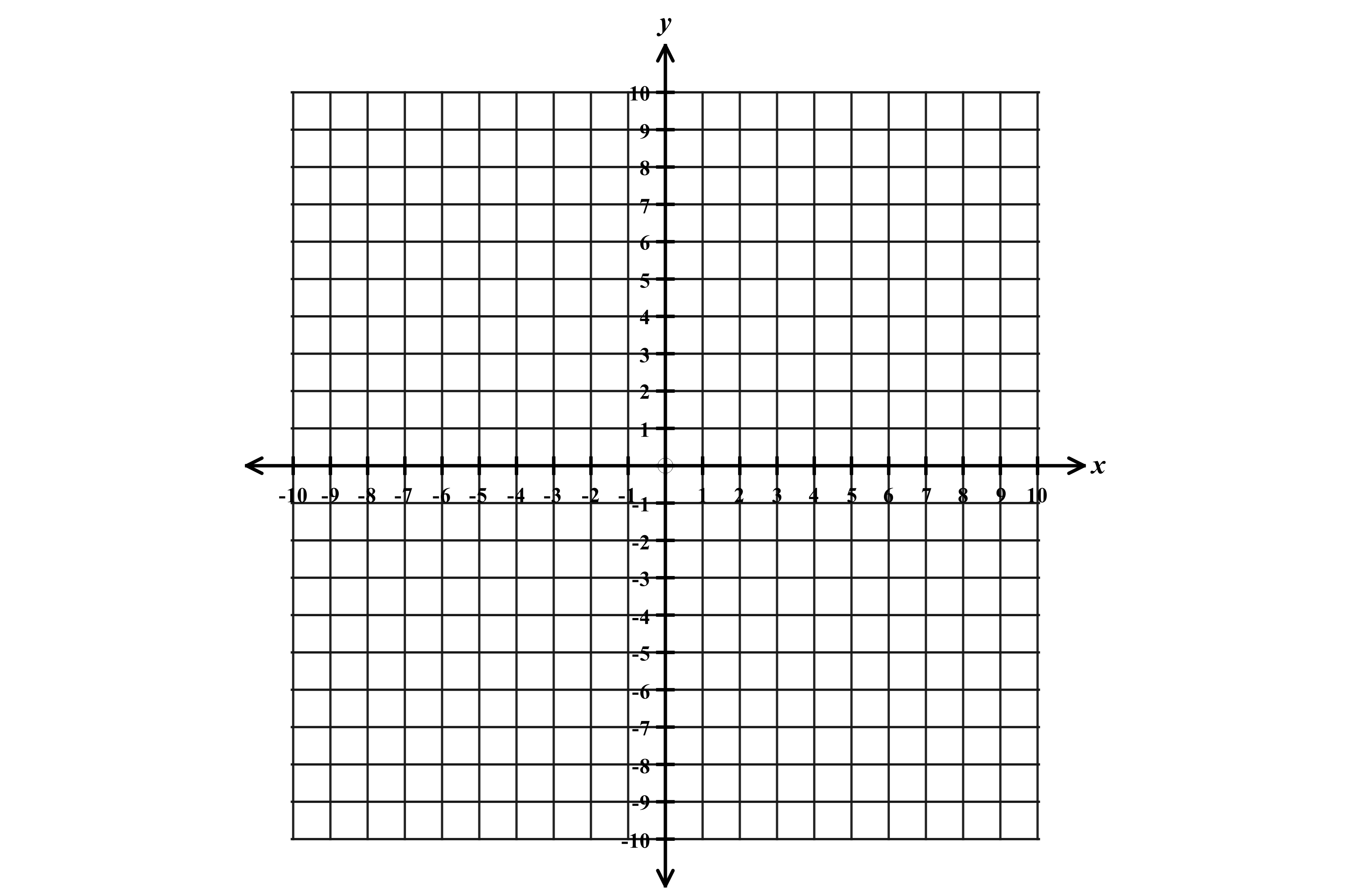
C. Write this function defined as a piecewise function.

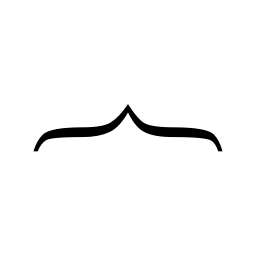


D. Over what interval is the function decreasing?

***Exercise #2***

Consider the function defined below.

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A. What type of function is defined over the interval

B. What type of function is defined over the interval

C. Graph the function on the grid provided.

D. Over what interval(s) is the function decreasing?