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|  | **What is a Piecewise Function?** |
|  | How to **Evaluate** a Piecewise function |
|  | How to Graph a Piecewise Function |
|  | How to Write a Piecewise Function |

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| A piecewise function is a functions defined by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ more \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Each “piece” of the function applies to a different part of its \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (\_\_\_\_ value). | Example*f(x)=* $x-2, if x\leq 0$Generic Graph.bmp$2x+1, if x>0$ |
| To \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ a piecewise function, \_\_\_\_\_\_\_\_\_\_\_\_\_ the value of \_\_\_into the rule for the part of the \_\_\_\_\_\_\_\_\_\_\_\_\_ that includes the value of x. | Evaluate the function *f* when (a) x=0 and (b) x=4*f(x)=* $x-2, if x\leq 0$$2x+1, if x>0$ a: \_\_\_\_\_\_\_\_\_\_\_\_b: \_\_\_\_\_\_\_\_\_\_\_\_ |
| To \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ a piecewise function, do above steps for evaluating a function, using multiple values for \_\_\_\_\_. Graph each piece \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. | *f(x)=* $x-2, if x\leq 0$Generic Graph.bmp$2x+1, if x>0$ |
| To \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ a piecewise function, write a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ for each piece. |  Generic Graph.bmp Left Piece: When x \_\_\_\_0,  Right Piece: When x \_\_\_\_0,  |