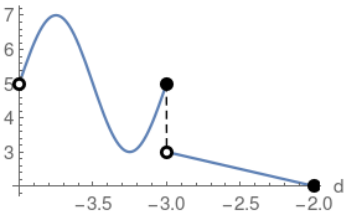
Piecewise Functions

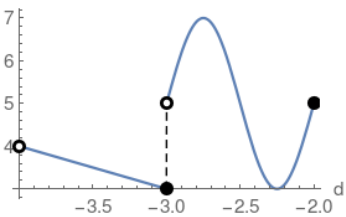
To define piecewise means that the function values and graphs are defined over a particular and generally limited section of the d-axis

$$\begin{cases} 2\sin(2\pi d) + 5 & -4 < d \le -3 \\ -d & -3 < d \le -2 \end{cases}$$



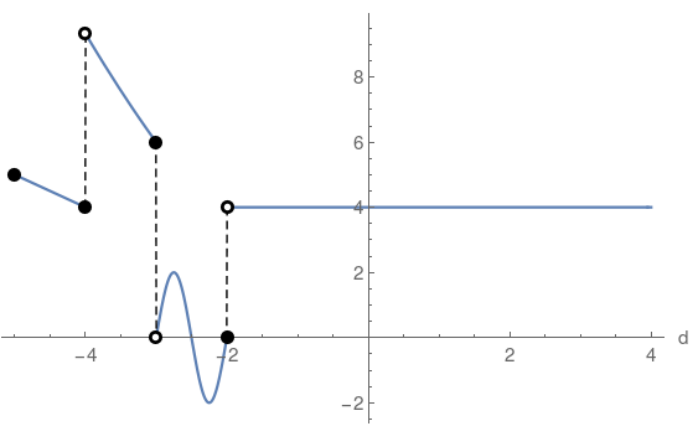
where two functions are juxtaposed together, and for that matter could be pieced differently i.e. swapped:

$$\begin{cases} -d & -4 < d \le -3 \\ 2\sin(2\pi d) + 5 & -3 < d \le -2 \end{cases}$$



More and more complicated functions could be juxtaposed together:

$$\begin{cases} -d & -5 \le d \le -4 \\ \frac{d^2}{3} - d & -4 < d \le -3 \\ 2\sin(2\pi d) & -3 < d \le -2 \\ 4 & d > -2 \end{cases}$$



Solid disk corresponds to inclusion of the point or any of $\leqslant$ $\geqslant$ $=$ operators

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Hollow disk corresponds to the exclusion or any of the $<$ $>$ operators

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